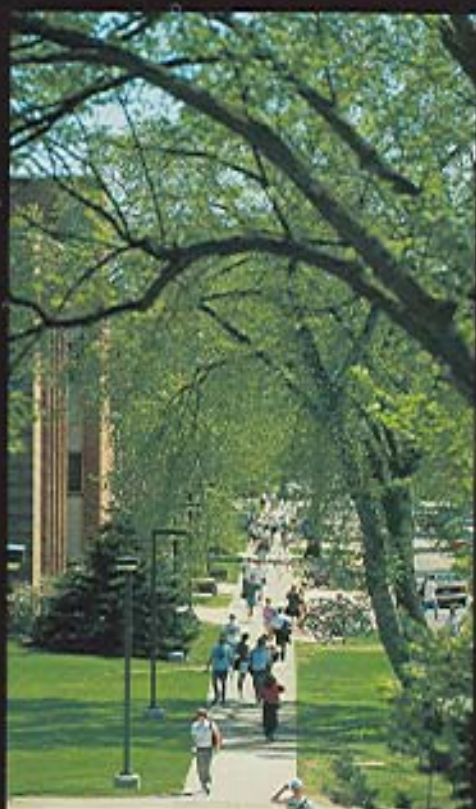


Graduate Bulletin 1995-1997

NOTE: The Graduate application fee for terms prior to Fall 1996, remains at \$35. All applications for the Fall 1996 term, and thereafter, the application fee will be \$38.



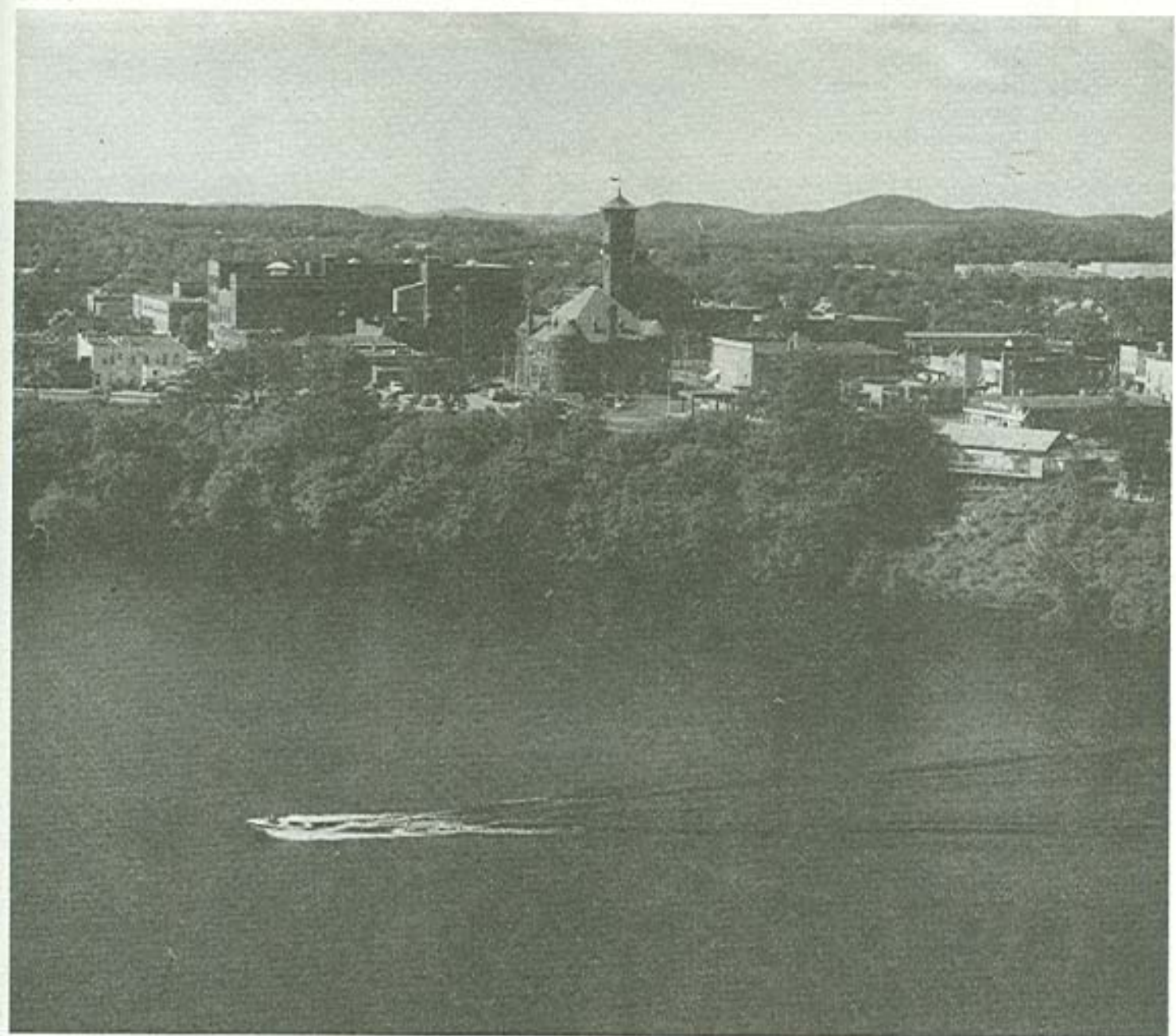
STOUT
UNIVERSITY OF WISCONSIN



STUDENT PROGRESS CHART

Requirement	When normally completed	Materials obtained from
Application for admission	At least 30 days prior to first term you plan to enroll. Once admitted, if you do not enroll within one year, or if you change programs, you must reapply. The initial application fee is \$35.	Form available from the Graduate Office in Bowman Hall.
Test of English as a Foreign Language (TOEFL)	Required as part of the admission criteria for all applicants from countries where English is not the primary language of instruction.	Test of English as a Foreign Language Box 899 Princeton, New Jersey 08541 U.S.A.
Declaration of finances to show sufficient funds	Required of all international applicants prior to processing of application and prior to issuance of the I-20 form.	Form available in the Graduate Office.
Official transcripts sent to Graduate Office	At the time application for admission is made to the Graduate College.	Request all colleges attended (<i>except UW-Stout</i>) to send two official transcripts of all work completed.
Notification of admission decision	Within 30 days after all needed materials are received by the Graduate Office.	Letter relating the admission decision will be sent from the Graduate Office.
Program Plan	Tentative Program Plan at first enrollment. Final plan required with application for degree candidacy.	Form available from program director or Graduate Office.
Register for classes each term	Register as scheduled by the registrar each term or on the first day of the session.	Obtain permit to register and program cards from the program director.
Transfer of graduate credit from another university	Credits must be preapproved by the program director. Transfer should be completed when filing for degree candidacy. Only credit used to meet program requirements will be transferred.	Have two copies of official transcript sent to the Graduate Office. Have program director complete Request to Transfer Credit form.
Begin research project	See program director for details and for research adviser assignment. Prior to gathering data for research involving human subjects, approval from the subcommittee on "Protection of Human Subjects Involved in Research" is required. See research adviser for details.	Packets of instructions and forms related to the research project are available in the Graduate Office or from the program director.
Apply for degree candidacy	Each program defines the optimum time to apply for degree candidacy. In all cases, candidacy must be approved before filing the Graduate Application for Degree card. <i>A final program plan must accompany the application.</i> Transfer credits will be recorded at this time.	Application for Degree Candidacy form available in the Graduate Office or from the program director.
File Graduate Application for Degree card	At the beginning of the term in which graduation is expected. The graduation fee is \$30 and is billed automatically from Student Business Services.	Graduate Application for Degree card and Chancellor's Information card available at the Graduate Office.
Obtain instructions for graduation ceremony	Near the end of the term in which you plan to graduate.	Pick up at the Dean of Students' Office or request that they be sent to you.
Submit one copy of the approved Research Report, the abstract and the Library Release Form to the Graduate Office	By the end of the term in which graduation is expected. Until it is filed and approved, degree requirements have not been met. There is an \$11 microfilming fee.	Instructions for typing and reproduction are available in the Graduate Office.
Supply information for placement credentials	During the last term of enrollment.	Information available from the Placement and Co-op Services Office and in the research packets.
Receive diploma and transcripts	Diploma will be sent two to three months after all records have cleared and fees have been paid.	Transcripts are available from the Registrar's Office upon written request about two weeks after the end of the term.

Graduate Bulletin



University of Wisconsin-Stout Menomonie, Wisconsin

An Equal Opportunity and Affirmative Action University

North Central Association of Colleges and Secondary Schools • National Council for Accreditation of Teacher Education

The Graduate Bulletin was prepared according to the best information available as of August 1994. All information regarding fees, admission, graduation requirements and course offerings is subject to change.

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Welcome

In opening this bulletin, you have taken the first step toward gaining an advanced degree. Choosing a graduate college is an important decision, one that will greatly affect your professional and personal development. It is important that you choose a university that offers a program to match your goals and interests.

UW-Stout, a special mission university, offers highly focused programs designed to meet societal needs in areas of education, human services, technology and management. Students who pursue graduate studies here already have some expertise in those areas. They come to the

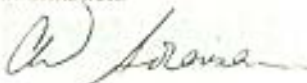
University with an appreciation for the importance of their profession and a desire to improve not only themselves, but their vocation.

UW-Stout is the second oldest graduate institution in the UW System. More than 8,500 students have graduated from our 13 master's degree programs and two education specialist programs since the institution began offering graduate programming in 1935.

If you decide to join us, you will be given opportunities not only to learn—but opportunities to apply what you have learned. In addition to professional studies, every program includes learning experiences in the immediate professional setting. As you progress through your program, you will work closely with faculty and receive assistance in planning your academic and professional goals.

That's the formal half of the program. As you expand your professional skills, you will grow in other ways. Your ideas will be challenged by students who share your general interests, but bring a different set of experiences to their studies.

Graduate programs and graduate schools differ greatly. I encourage you to look carefully at the bulletin and consider whether the purposes, philosophies and growth environment at UW-Stout coincide with your needs. If you find a program that interests you and want to learn more, please contact the appropriate program director. You may also write directly to the Graduate College, 128 Bowman Hall, UW-Stout, Menomonie, WI 54751 for more information.



Charles W. Sorensen
Chancellor



General Information



THE UNIVERSITY



UW-Stout

UW-Stout is one of 13 publicly supported universities in the University of Wisconsin System. It was founded as a private institution in 1891 by James Huff Stout. A Menomonie industrialist and a man of great vision, he saw that students in America's developing industrial society needed a different kind of education, an education broader than that offered by traditional curriculum. Since its founding, UW-Stout has gained a position of national and international leadership in industry, commerce, education and human services. Its programs in those fields are among the finest in the world. Strong programs in the areas of man's relation to technology, vocation and society have also been established. Although UW-Stout is a career-oriented university, its leaders have had the foresight to make the humanities and social sciences key parts of the total educational program.

UW-Stout's Special Mission

UW-Stout, as a special mission institution, serves a unique role in the University of Wisconsin System. UW-Stout is characterized by a distinctive array of programs leading to professional careers focused on the needs of society. An undergraduate degree in manufacturing engineering, and undergraduate and graduate degrees in the study of technology, applied science, art, industrial management, human behavior, and home economics are presented through an approach to learning which involves integration of theory, practice and experimentation. Extending UW-Stout's mission into the future requires that instruction, research and public service programs be adapted and modified as the needs of society change.

Research

Research and scholarship by faculty and staff are encouraged to constantly add to the bodies of knowledge on which degree programs are based. Research and programmatic activities in teacher education, technology and engineering, curriculum development, applied mathematics, service management, food science, and numerous other disciplines and interdisciplinary areas are formulated, executed, and reported. Field surveys and experimental projects are reported in professional literature and to professional organizations. Consultation on research design is offered. Research and scholarship are encouraged and coordinated through the office of Research Promotion Services (11 Harvey Hall, 715/232-1126).

The Faculty

UW-Stout has a specialized faculty comprised of individuals nationally and internationally recognized in their respective fields. Classes are taught and research projects coordinated by highly qualified professionals. The graduate faculty is composed of approximately 230 members. Of these, 155 hold earned doctorate degrees, while others hold specialized degrees in their respective fields. One of the fine traditions at UW-Stout has been the faculty and staff commitment to provide extra help in one-on-one situations to students.

Facilities

Modern and well-equipped facilities mark UW-Stout's 107-acre campus. We are proud of our laboratory-intensive programs. More than 40 laboratories, encompassing more than 150,000 square feet, are available in the School of Industry and Technology for study and research in the areas of electronics, power, industrial management, industrial design, industrial graphics, packaging, plastics, metals and woods.

The School of Home Economics maintains laboratories for the study of food science, dietetics, hospitality, tourism, interior decorating, retail merchandising, clothing and textiles design, human development, and family and consumer education services.

The School of Liberal Studies offers studios to support programs in art, industrial design and interior design, and specialized mathematics computer laboratories.

The Stout Vocational Rehabilitation Institute provides research and practicum experience for students in the Vocational Rehabilitation program, in the School of Education and Human Services. Students work with professionals at the institute to provide services for clients referred by state agencies. The school's Clinical Services Center uses state-of-the-art videotape equipment as an integral part of instruction in the Marriage and Family Therapy, Guidance and Counseling, and School Psychology degree programs.

Located in the center of the city of Menomonie, adjacent to the downtown business district and Lake Menomin, UW-Stout offers an attractive, convenient and accessible campus setting.

Academic Year

The academic year is composed of two semesters, which are further divided into two nine-week quarters. The designation of a quarter represents one-half a semester and should not be confused with the quarter system used at other universities. Courses scheduled on the quarter basis meet twice as often each week as courses scheduled on the semester basis. Credit hours are awarded on a semester credit hour basis for courses scheduled on either basis. The maximum load for graduate students in a semester is 16 credits; during the summer session, it is one credit per week. Audits are considered part of the load.

Summer Session

A summer session, approximately 10 weeks long, is offered each year. The regular eight-week summer session begins about the second week in June. A two-week pre-session may also be available. Courses of varying lengths of time are offered so that a combination of one-, two-, three- or five-week courses may be taken. Credits may be earned at the rate of one semester hour per week of attendance, making it possible to earn up to 10 credits during a summer session. Due to high demand, many graduate level courses are offered. A Summer Session Bulletin, published each April, contains complete information about offerings, class schedules, enrollment procedures, degree programs and housing, and is available from the Office of Continuing Education/Extension and Summer Session (140 Vocational Rehabilitation Building, 715/232-2693).

Evening, Saturday and Off-Campus Courses

Evening, Saturday and off-campus credit courses are offered through the Continuing Education Office (140 Vocational Rehabilitation Building, 715/232-2693). Registration for these courses is completed at the first class meeting. Textbooks required for the class are made available for purchase at the first class meeting.

Course numbers, titles and content are the same as regular courses. To be awarded graduate credit for extension work, the student must have been admitted to the Graduate College.

English Language Institute

The English Language Institute (418 Harvey Hall, 715/232-2306) provides instruction in English for people who do not speak English as their native language. Students receive 20 hours per week of language instruction. In as little as a year, students can achieve a level of proficiency that would allow them to attend the university.

The English Language Institute has a professional teaching staff, and manages its own recruitment and student services. It is funded by fees students pay to attend the Institute.

International Programs

UW-Stout has a major commitment to international students and encourages the exchange of ideas and cultures among students, faculty and the community. Many of Stout's graduates have careers that require an understanding of people and cultures in the global community.

Students from more than 35 nations attend UW-Stout each year. The largest groups are from Taiwan, Japan and the People's Republic of China. More than half of the international student body at UW-Stout pursue graduate degrees.

Office of International Programs International programs and student activities are coordinated through the Office of International Programs (400 Bowman Hall, 715/232-1896). This office provides a service function to the university community by coordinating all overseas involvements, and providing overseas opportunities for students and staff.

International Student Services The special needs of international students are met through professional and referral services provided by the coordinator of International Student Services. These services include confidential personal counseling on immigration matters, financial problems, academic questions, social customs and personal concerns. Other services which promote cross-cultural understanding include new student orientation, host family arrangements, problem solving and liaison activities in the university and Menomonie area community.

Spanish Language Program Although UW-Stout does not offer any graduate level courses of study abroad, it does offer an intensive Spanish language program for students who wish to improve their Spanish language skills. Located at the Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico, this program is open to both graduate and undergraduate students. The program runs for six weeks beginning in mid-June and offers about 23 hours of language instruction each week. Cultural activities and field trips are also included. Students enroll at UW-Stout for six credits and pay regular UW-Stout tuition and fees. For additional information about this opportunity, contact the Office of International Programs (715/232-1896).

About This Bulletin

This bulletin was prepared according to the best information available as of August 1994. However, information regarding fees, admission, graduation requirements, names, telephone numbers, and course offerings, is subject to change. Information may be verified by calling the Graduate Office at 715/232-2211.

Additional information about UW-Stout graduate policies is available from the Graduate Office. Students who can justify exception to these policies may make a written request for exception (form 104-0132 available in the Graduate Office) to the Committee on Exceptions to Graduate Policy. The form requires program directors to make a recommendation relative to the request. The committee meets on a regular basis. Notification of action on requests will be made by the program director.

THE GRADUATE COLLEGE

The Graduate College at UW-Stout is fully accredited by the North Central Association of Colleges and Secondary Schools (NCA) and the National Council for the Accreditation of Teacher Education (NCATE) to offer work at the master's (*fifth year*) and education specialist (*sixth year*) levels. The Marriage and Family Therapy program is accredited by the American Association of Marriage and Family Therapists.

Institutional memberships include the Midwest Association of Graduate Schools and the Council of Graduate Schools in the United States.

The Graduate College, a unit of the division of Academic and Student Affairs, provides oversight for graduate education in the university. The Graduate College administers graduate admissions, graduate assistantships, records, policies and other procedures relating to graduate students. The Graduate College includes, in addition to its administrative personnel, the Graduate Office, which provides services to graduate students and program directors.

The Graduate Council establishes Graduate Policy. The Graduate Committee and the Graduate Student Council provide advice to the Graduate Council. Membership on the Graduate Council includes all graduate program directors, three graduate faculty members elected from each school, the president and the faculty adviser of the Graduate Student Council, the associate dean for Research and Graduate Studies, and the associate vice chancellor, who chairs the council. The work of the council is aided by a Graduate Committee, a Committee on Exceptions to Graduate Policy, a subcommittee on the Protection of Human Subjects in Graduate Student Research, and other committees as needed.

The Graduate Student Council includes one student elected from each graduate program. The chair is elected by the group. In addition, during the summer term, the Graduate Student Club holds four informal meetings for graduate students and faculty.

Graduate Administration

Dr. Charles W. Sorensen

Chancellor

320 Administration Building, 715/232-2441

Dr. George DePuy

Provost and Vice Chancellor for Academic and Student Affairs

301 Administration Building, 715/232-2421

Dr. Robert Sedlak

Associate Vice Chancellor

302 Administration Building, 715/232-2421

Dr. Ted Knous

Associate Dean for Research and Graduate Studies

128 Bowman Hall, 715/232-2452

Programs and Directors

Master of Science Degrees

Education

Dr. Donald Stephenson, Director

428 Education and Human Services Building, 715/232-1310

Food Science and Nutrition

Dr. Janice Timmer, Director

205 Home Economics Building, 715/232-2183

Guidance and Counseling

Dr. Arlene Cooper, Director for Mental Health Counseling

230 Vocational Rehabilitation Building, 715/232-1305

Dr. Sue Stephenson, Director for School Counseling

229 Vocational Rehabilitation Building, 715/232-2619

Home Economics

Dr. Karen Zimmerman, Director

117 Home Economics Building, 715/232-2530

Hospitality and Tourism

Dr. Randall Upchurch, Director

439 Home Economics Building, 715/232-1407

Industrial/Technology Education

Dr. Leonard Sterry, Director

224D Communication Technologies Building, 715/232-1367

Management Technology

Dr. Zenon Smolarek, Director

105 Technology Wing - Jarvis Hall, 715/232-1144

Marriage and Family Therapy

Dr. Charles Barnard, Director

222 Vocational Rehabilitation Building, 715/232-2404

Risk Control

Dr. John Olson, Director

205 Communications Center, 715/232-2604

School Psychology

Dr. Calvin Stoudt, Director

226 Vocational Rehabilitation Building, 715/232-1442

Training and Development

Julie Furst-Bowe, Director

143 Communication Technologies Building, 715/232-1321

Vocational Education

Dr. Orville Nelson, Director

218 Applied Arts Building, 715/232-1362

Vocational Rehabilitation

Ms. Shirley Stewart, Director

403 Education and Human Services Building, 715/232-2499

Education Specialist Degrees

Guidance and Counseling

Dr. Ed Biggerstaff, Interim Director

250 Vocational Rehabilitation Building, 715/232-2687

Industrial and Vocational Education

Dr. Orville Nelson, Director

218 Applied Arts Building, 715/232-1362

ADMISSION

Eligibility for Admission

A person who has a bachelor's or higher degree, awarded by an accredited institution of higher education, may apply for admission. Such accreditation will usually be given by a regional accrediting agency recognized by the United States Department of Education, the Council on Postsecondary Accreditation or, in selected cases, an agency judged appropriate by the admissions examiner.

An applicant for a master's program must have been awarded a bachelor's degree or equivalent, or apply for dual level. A program or combination of programs in higher education encompassing a period of study of at least four academic years which leads to the award of a diploma or certificate may be judged by the program director and the associate dean to be equivalent to a bachelor's degree.

An applicant for an education specialist program must have been awarded a master's degree or apply for dual level admission.

For information about Non-Program Enrollment, see the special section on Non-Program Enrollment.

Application for Admission

Persons seeking admission to a graduate or certification program must submit a properly completed application form (104-0111) to the Admissions Office 30 days before the expected term of enrollment. Individual graduate programs may have additional requirements: Guidance and Counseling (M.S.), Hospitality and Tourism, Marriage and Family Therapy, School Psychology, Training and Development, and Vocational Rehabilitation each have special (*internal*) application forms in addition to those required by the Graduate College, and they require letters of recommendation and interviews. The Education Specialist program requires a vita and letters of recommendation.

Applicants need only submit a transcript that shows the highest degree awarded above an associate degree. If the undergraduate transcript shows grades for less than 55 credits, then additional transcripts will be required. Applicants may submit all transcripts (*graduate and undergraduate*) if they so choose. The applicant should request the registrar(s) to send the official transcript. An applicant may submit an official transcript providing it bears no restrictive statement. UW-Stout transcripts need not be requested. An applicant applying prior to being awarded a degree must submit a transcript which shows work through all but the last term. Such applications are subject to re-evaluation based upon the final transcript. In rare cases, an applicant may submit an attested copy of a transcript.

A \$35 non-refundable fee is required.

Program directors may request additional information such as references, a resume and a statement of goals.

All applicants from countries in which English is not the official language of instruction must take the Test of English as a Foreign Language (TOEFL) and have the score sent to the Graduate College, or have successfully completed an English as a Second Language Program which has been formally recognized by the university. The minimum acceptable score is 500. Individual programs may set a higher standard; see individual program descriptions in this Graduate Bulletin.

International students must show that adequate financial support exists for the planned period of study by filing a Declaration of Finances

which is available from the Graduate Office (128 Bowman Hall, 715/232-2211). In addition, students being supported by a government agency must present written evidence of approval by that agency for the program being requested.

Some programs have specific time frames for application. Marriage and Family Therapy requires that the application file be complete; that is, all application documents on hand, by March 15 for the next academic year. Guidance and Counseling (M.S.) requires that the application file be complete by October 1 for the spring term, February 1 for summer and fall terms. Hospitality and Tourism advises students to complete the application process by May 1 for summer and fall terms, and by October 1 for the spring term. Applications for the School Psychology program should be complete by March 15 for summer and fall terms.

Evaluation of Admission Criteria

Applicants are evaluated on the basis of previous degree work, scholastic achievement, appropriateness of educational background and the relevancy of work experience.

Grade point averages will usually be identified on the transcripts submitted by the degree-granting institution. In cases where the applicant attended more than one institution and less than 55 credits were awarded by the degree-granting institution, or where a grading system other than the following was used, the overall grade point average will be calculated by the graduate student evaluator.

Grading System Used to Evaluate Transcripts

Undergraduate Work			Graduate Work		
Grade	Point	Description	Grade	Point	Description
A	4.00	Excellent	A	4.00	Exceptional
A-	3.67		A-	3.67	
B+	3.33		B+	3.33	
B	3.00		B	3.00	Satisfactory
B-	2.67	Average	B-	2.67	
C+	2.33		C+	2.33	
C	2.00		C	2.00	
C-	1.67	Passing			Marginal
D+	1.33				
D	1.00				
D-	0.67				
F	0.00	Failure	F	0.00	Failure

The appropriateness of course work taken will be evaluated by the program director(s) in relation to the optimum background specified for the program(s) requested. Educational deficiencies may necessitate provisional admission which would require additional undergraduate and/or graduate work.

Where applicable, work experience will be reviewed by program directors in the evaluation process. Lack of relevant work experience may lead to denial of admission.

An applicant may be denied admission on the basis of any one or any combination of the following: absence of a degree from an accredited institution, low grade point average, inappropriate educational background, insufficient relevant work experience or enrollment limitations.

Admission Status

Admission may be full, probationary, provisional, or trial.

Full Status An applicant fulfilling the specified requirements for educational background and work experience will be granted full admission provided that the following grade point averages were attained. The general requirement for full admission is a 2.75 grade point average overall, or 2.90 grade point average on a minimum of the last 55 credits attempted. A grade point average of 3.25 on master's degree and other graduate work is required for full admission to an Ed.S. program. However, individual graduate programs may require a higher grade point average. Check the program requirements listed elsewhere in this bulletin.

Probationary Status An applicant for a master's program may be granted probationary admission with an undergraduate grade point average ranging from 2.25 to 2.75. It should be noted that education programs may require an absolute minimum grade point average of 2.75 for admission if the applicant seeks certification. Applicants accepted for an Ed.S. program may be granted probationary admission with a grade point average ranging from 3.0 to 3.25 on the master's degree and other graduate work. In all cases, check specific program requirements listed elsewhere in this bulletin.

Provisional Status Individual programs may require specific educational preparation. This preparation could include certain majors or specific courses as well as grades. Check program requirements listed elsewhere in this bulletin. Where deficiencies are evident, the program director will authorize provisional admission but stipulate additional courses with a requisite grade. This course work could be graduate or undergraduate, and will not count toward program requirements.

An applicant may be admitted with both probationary and provisional status.

Trial Status Trial admission may be granted upon recommendation of the program director to an applicant for a master's degree who has less than a 2.25 grade point average. The applicant must take a trial block of course work specified by the program director. The program director will specify a minimum grade of "B" for each course in the block or grade point average of 3.0 for the entire trial block. Upon successful completion of the trial block, probationary academic standing will be granted; otherwise, the student will be dropped. Trial block course work will not count as part of the requirements of the program.

Each applicant generally will be informed of admission or denial within 30 days of the receipt of all required materials. Applicants to programs with priority dates will be notified about 30 days after the priority date has passed.

Admission is granted for one year or for one term depending upon the program requested. Admitted applicants who do not enroll within that year or term must reapply. Reapplication may not require repayment of the application fee.

A student may change programs, or may change from non-program to a program classification (form 104-0111). All admission requirements must be fulfilled to effect the change.

Dual Level Admission

Undergraduate students may apply for admission to a master's degree program provided that a bachelor's degree will be awarded at the end of the term in which the first graduate work will be taken and that all other regular admission requirements can be met. The applicant must submit a "Dual Level Program Enrollment Statement" (form 104-0116), in addition to the other application materials, to the Graduate College. A student admitted on dual level who is not awarded the undergraduate degree at the end of the specified term, will be dropped from the Graduate College without loss of graduate credit. Upon subsequent receipt of the degree, the student may reapply for admission. If scheduling problems are evident, the associate dean can allow dual level to extend through two successive terms. Dual-level students are governed by the Graduate Load Limit policy.

Graduate students may be admitted to an Ed.S. program providing that the master's degree will be awarded at the end of the term in which Ed.S. work is taken and that the graduate grade point average is at least 3.25 at the time of application. The "Dual Level Program Enrollment Statement" must be submitted along with the other regular Ed.S. admission requirements. A student admitted on dual level (M.S./Ed.S.) who is not awarded the master's degree at the end of the specified term, will be dropped from the Ed.S. program without loss of credit. Upon subsequent receipt of the master's degree, the student may reapply for admission to an Ed.S. degree.

Multiple Program Admission

A student may apply for and enroll in more than one master's program at a time. However, the program that will be completed first must be identified. Separate applications and accompanying materials are required for each.

Second Master's Program

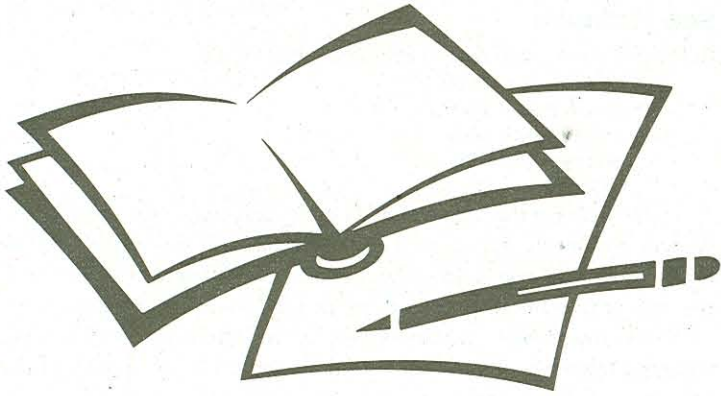
A graduate of a master's degree program may earn a second master's degree by meeting program requirements and completing a minimum of 15 credits at UW-Stout, including the research requirement. The seven-year limit does not apply to the credits from the first master's degree that are used to meet the requirements of the second master's degree.

Non-Program Enrollment

Students may request permission to enroll in graduate courses as a non-program student (*special*) by completing the first page of the Application for Admission (form 104-0111). To be eligible, that individual must hold a bachelor's degree from an accredited institution. Non-program students are subject to the graduate policies. Individuals who have been dropped from a program are not eligible for non-program enrollment, but students who are in good standing in a program may request non-program enrollment, in which case they would become a non-program student. Subsequent enrollments do not require a new application for admission.

Non-program students are advised in pursuing their non-program work by the associate dean for research and graduate studies. Non-program students may enroll in any 500 or 600 level course, and most 700 level courses. Certain 700 level courses, such as research, practicum and internship, and all 800 level courses are restricted to program-enrolled students. A current list of restricted courses is available from the Graduate College.

REGISTRATION FOR CLASSES



Graduate students may register for the Fall term in March, for the Spring term in October, and for the Summer Session in March. Mail registration is available for the Summer Session only. Prior to registering for each term, graduate students will be required to meet with their program director for consultation in course selection according to their program plan. The program director must give written approval for the course request and any subsequent course changes during the term. The approved course request and permit are submitted to the registrar (109 Bowman Hall).

Permit to Register

Students must obtain a Permit to Register for each term. Both new and continuing students usually receive their permit from the program director at the time of their advisement session.

The *Timetable* is available at registration time prior to each term and is provided to students through the service desk at the Memorial Student Center. The *Timetable* contains listings for graduate (700's), dual level (500's and 600's), and undergraduate (below 500) offerings. All policies affecting students in the areas of drop and add deadlines, class attendance, grading and other helpful information are printed in the *Timetable* and *Student Handbook*.

Current Address

Students are required to submit a valid address when they register and keep that information current in the university data system. Two addresses are kept for each student. One is the permanent home address which is used for mailing grades. The second is the local address where you live while a student, and is used for all other university correspondence including statements of accounts. Students may submit a change of address to the Registration and Records Office (109 Bowman Hall) anytime during the year.

FEES

Application Fee

The application fee for admission to a graduate program is \$35.

Enrollment Fees

Graduate fees are set by the University of Wisconsin Board of Regents and are subject to change. Fees charged for nine or more credits for the Fall semester 1994 were: \$1,418.69 for Wisconsin residents; \$1,407.19 for Minnesota residents; and \$4,287.19 for non-residents. If you have questions, contact Student Business Services (126 Administration Building, 715/232-1656).

Resident Status

Adult students who have been bona fide residents of Wisconsin for 12 months immediately preceding the beginning of the term of enrollment at the university are considered to be resident students for tuition purposes.

Any minor or adult student who is a graduate of a Wisconsin high school and whose parents are bona fide residents of this state for 12 months preceding the beginning of the term of enrollment, or whose last surviving parent was a bona fide resident of the state for 12 months preceding death, are also considered to be residents.

In determining bona fide residence, intent to establish and maintain a permanent home in Wisconsin is determinative. The burden of proof is on the student but intent may be demonstrated or disproved by factors including, but not limited to, filing of Wisconsin income tax returns, possession of a Wisconsin operator's license, place of employment and self-support. Persons employed full time in Wisconsin, who were relocated here by their employer or who came to Wisconsin for employment and who accepted employment before applying for admission to the University, and their spouses and dependents, are also considered resident students if they can demonstrate an intent to establish and maintain a permanent home in the state.

Non-resident members of the armed forces and persons engaged in alternative service who are stationed in Wisconsin for purposes other than education, their spouses and minor children, are also considered to be residents for tuition purposes during the period such persons are stationed in Wisconsin.

Part-Time Students

Part-time graduate students are those carrying fewer than nine credits during a semester, and those carrying fewer than six credits during the eight-week summer session.

Dual Level Students

Dual Level students (*eligible undergraduates carrying graduate work simultaneously*) pay the applicable undergraduate fee. Students are responsible for any expense—such as the printing of questionnaires and maps, typing, or thesis binding—incurred while conducting research.

Fee Refunds

Refunds for early withdrawal during a semester are:

First week	100%
Second week	100%
Third week	50%
Fourth week	50%
Fifth week	0%

In determining the withdrawal date, the university uses the date the student notifies the school of the withdrawal; or if the student fails to notify the school and is otherwise unable to verify date of withdrawal, the date of the request to refund will be used to determine the refund.

Students who enter military service by enlistment or otherwise shall receive a refund in accordance with the standard refund policy of the university. Other exceptions may be made upon approval of the chancellor or his designee and the designated Board of Regents representative.

Minnesota – Wisconsin

Tuition Reciprocity Agreement

An agreement between the states of Wisconsin and Minnesota permits residents of either state to attend higher education institutions in the other state at the same tuition rate as their home state.

To be eligible under this agreement, a student must file an application prior to or during the term or semester in which he or she expects to first receive the waiver of the non-resident portion of tuition. Applications are available from Student Business Services (126 Administration Building, 715/232-1656). A student is deemed to meet this application date requirement if his or her completed application is postmarked no later than the last day of scheduled classes. A term or semester is deemed to run through the last day of scheduled classes as published in the academic calendar of the institution. Neither the Minnesota Higher Education Coordinating Commission nor the University will be financially liable for students enrolled under the reciprocity agreement who have not received prior approval and certification by the Minnesota Higher Education Coordinating Commission, Suite 400, Capitol Square, 550 Cedar St., St. Paul, MN 55101.

Microfilming Fee

At the time the student files a copy of the research report with the Graduate Office, an \$11 fee is charged for the microfilming process.

Graduation Fee

Upon completion of 20 credits, candidates will be billed a one-time, non-refundable, graduation fee of \$30. This fee is for the diploma, diploma cover and other accessories used in commencement exercises. It does not cover the fees for cap and gown, which are available from the University Bookstore.

Special Course Fees

Many individual courses require special course fees. These are identified in the *Timetable* published each semester and summer session.

FINANCIAL ASSISTANCE

Financial Aid Office

The Financial Aid Office (210 Bowman Hall, 715/232-1363) administers financial aid funded primarily from state and federal resources. Applications are available in the Financial Aid Office and should be filed in the office by April 1, preceding the academic year, or March 1, preceding the summer session.

Aid received through the Financial Aid Office is based on need and enrollment status. For financial aid purposes, eligible enrollment status means degree program students. All awards will be adjusted so as not to exceed the determined need. To be eligible, the student must be enrolled in a graduate degree program at UW-Stout and must maintain satisfactory academic progress.

All applicants must complete a Free Application for Federal Student Aid which is used to calculate financial need. The office awards aid in the form of grants, loans or work. Eligible students may receive one or a combination of these depending on a student's financial need.

Graduate students are expected to maintain satisfactory academic progress in order to retain enrollment status and financial aid eligibility. Refer to the Graduate Office for Progress Policies.

Types of Aid Available

Assistantship Connected Tuition Waivers are available to graduate students from states other than Wisconsin and Minnesota, who hold assistantships of one-third time or more. Eligible students may be awarded a partial or full waiver of the non-resident portion of tuition. Non-resident tuition waivers are subject to the availability of funds.

Advanced Opportunity Grants (AOP) are available to a limited number of minority and disadvantaged students. Preference is given to Wisconsin residents. The amount of the award varies but is generally the amount of resident fees. Applications are available in Multicultural Student Services (206 Bowman Hall, 715/232-1096).

Federal Stafford Loans are available through private lenders (*banks, savings and loan associations, and credit unions*). The maximum amount a graduate student may borrow is \$8,500 per academic year. The loan is interest free until six months after graduation, termination of university attendance or change in enrollment status to less than half-time (*five credits per semester or three credits per Summer Session*). Interest is charged during the repayment period, which is a maximum of 10 years. Non-need based, "unsubsidized" Federal Stafford loans are also available; interest is charged while in school.

Federal Perkins Loans are available to graduate students if their primary source of borrowing as an undergraduate has been this program. The maximum amount that can be borrowed, including undergraduate work, is \$30,000. Interest of 5 percent is charged during the repayment period of up to 10 years. The Perkins Loan program allows for cancellation of all or part of the loan in return for certain types of teaching, service as a Peace Corps or VISTA volunteer, or service as a law enforcement or corrections officer. The Department of Defense may repay a portion of the loan in return for enlisted service.

Stout University Foundation Scholarships are available through the Foundation Office (*Louis Smith Tainter House, 715/232-1256*). Scholarships vary in amount and awarding criteria. Deadline for application is March preceding the academic year.

Federal Work-Study Program provides job opportunities on campus. Under this program, students earn an hourly wage up to a yearly earning limit determined by the Financial Aid Office.

University Employment Program (State Payroll) is available to students to earn an hourly wage as determined by the department which does the hiring.

Residence Hall Staff Opportunities are available to graduate students to serve as a Resident Adviser on a floor community, or as an Assistant Residence Hall Director. Resident advisers receive remuneration in the form of room and board. The assistant hall director position is salaried. Assistant hall director applicants are required to have two years undergraduate staff or active residence hall government experience. Application for both positions should be made to the Residence Life Office (170 Price Commons, 715/232-1121).

Rehabilitation Services Administration Grants (RSA) provide a number of scholarships for qualified students accepted into the Vocational Rehabilitation program. The scholarship provides tuition assistance and a monthly stipend for graduate students for a maximum period of one year, and are available for students with a concentration in Vocational Evaluation. Recipients must meet the requirements of Rehabilitation Services Administration, the Graduate College and the Vocational Rehabilitation Program. Scholarships are only awarded to U.S. citizens and priority is given to applicants with prior experience, students who are disabled, members of minority groups and persons with financial need.

Bureau of Indian Affairs Grants (BIA) are available to U.S. citizens who can establish need and proof of at least one-fourth Native American descent as certified by application to the appropriate tribal or Bureau of Indian Affairs agency. This grant has no set limit amount and is renewable for up to five years total undergraduate and graduate study.

Wisconsin Native American Student Assistance Grants (WIG) award up to \$1,800 for Wisconsin residents who are Native Americans and demonstrate financial need. This grant is renewable for up to 10 total semesters, undergraduate and graduate study total.

International Student Tuition Waivers may be awarded to students from other countries based on scholarship and a recommendation from the program director. Awards are subject to the availability of funds. Awards will be made only after admission to the Graduate College has been granted. Students must be enrolled as full-time graduate students to receive this award. Interested students should follow all degree application procedures as well as filing an application for the International Student Tuition Waiver with the Financial Aid Office. The application deadline is May 1 with awards announced about June 1. Applications received after May 1 will be considered only if additional funds become available. Applications are available at the Office of International Student Services (400 Bowman Hall, 715/232-2132) or the Financial Aid Office.

Graduate Assistantships

Graduate assistantships provide stipends in return for a designated amount of professional service. Graduate teaching assistantships provide stipends in return for time spent teaching a laboratory or discussion session. Assistantships range from one-eighth time to one-half time. The stipend for a one-third time assistantship for Fall 1994 is \$4,711.64. Graduate assistantships of one-third or more time may include a partial or full waiver of the non-resident portion of tuition. Non-resident tuition waivers are subject to availability of funds. Students with a waiver for two consecutive semesters, or a waiver for spring semester, may also receive the award of a tuition waiver for the regular summer session. A graduate assistant must carry a minimum of six credits per semester or three credits per summer session while on the assistantship. The maximum credit hour load may also be limited during the term of the assistantship. Graduate assistantships are controlled by the various departments, units and/or research grants of the University.

To become eligible for an assistantship, a student must be admitted to a graduate degree program (*graduate specials and dual-level students are not eligible*). Students who have made application for graduate assistantship, and have been admitted to the Graduate College, generally have the best opportunity to make their qualifications known to the various supervisors who employ graduate assistants. A list of assistantship positions available will be sent to eligible students who have filed an Application for Graduate Assistantship (*form 104-2130 available from the Graduate Office*) as soon as possible in the spring term for fall term employment. Early application is essential. It is the responsibility of the student to make contact with the supervisor indicated on the list, for more information on the positions and setting up an interview. The department offering the position makes a recommendation to the Graduate College concerning the graduate assistant to be hired. The Graduate College officially offers the position to the prospective applicant. An application is valid for one academic year.

Assistantships are normally filled on an academic year basis. The charts below indicate the hours of work required and credit load limitations for assistantships:

	Non-Teaching		Teaching		Lab Teaching	
	Hours per: Week	Year	Credits per: Sem.	Year	Credits per: Sem.	Year
One-half time	20.0	640	6.0	12	14.0	28
One-third time	13.3	426	4.0	8	9.5	19
One-fourth time	10.0	320	3.0	6	7.0	14

The titles graduate program or project assistant designate a graduate student employed to assist with research, training or other academic programs or projects. The graduate assistant teaches in a classroom or laboratory in an instructional department.

Credit Load Per Semester

(A condition of employment)

Assistantship	Maximum Load	Minimum Load
One-half time	12	6
One-third time	13	6
One-fourth time	14	6



Student Research Fund

The purpose of the Student Research Fund is to provide undergraduate and graduate students with funds to support expenses incurred during the performance of, or in reporting the results of, their independent research. Research is broadly defined as the systematic, scholarly investigation of some phenomenon or series of phenomena. This includes the creative pursuits characteristic of the arts and humanities. It is expected that this research will be conducted by the student, with guidance provided by a member of the faculty.

To be eligible for support from the Student Research Fund, a student must be enrolled for thesis, research problems, field study or a special topics/independent study research credit class under the direction of a faculty mentor. The Student Research Fund is supported by the Graduate College and Research Promotion Services. Applications are available in the Graduate Office (128 Bowman Hall, 715/232-2211).

PROGRAM PLAN

Requirements of the Program Plan

Descriptions of program plans are found in this Graduate Bulletin. These descriptions are regulated by the governance procedures of UW-Stout. The individual student's program plan is initiated by the student, approved by the program director, and submitted to the Graduate Office along with the Application for Degree Candidacy. The approved program plan must identify the year and term of the earliest credit that will be used to meet program requirements. The program plan is kept on file with the program director.

Master's programs require a minimum of 30 credits. Education Specialist programs require a minimum of 36 credits. Individual programs and/or certification may specify additional credits. Check the program requirements listed elsewhere in this bulletin.

Students will be held to the program plan on file in the Graduate Office at the pregraduation checkout.

One-half of the minimum credits required for graduation must be in graduate only (700-800) courses.

Independent Study

Students may design special topic courses independent of the curriculum. This option is open during any enrollment or course-add period. Summer Session enrollments are closed at the end of the fifth week of the eight-week session. Students may initiate the process by obtaining an Application for Independent Study from the office of the school in which the independent study is to be offered. The student selects a topic and completes the form. After a topic has been identified and approved by the appropriate department chairperson, a member of that department is appointed study coordinator. The independent study coordinator provides counsel and aid to the student in achieving the approved desired learning objectives. Credits are awarded on the basis of expending a minimum of 48 hours of effort for each credit and on an evaluation of the extent to which the stated objectives were met. Existing courses are not offered as independent study topics.

Students should consult in advance with their program director to find out whether the proposed independent study may be used in the degree program.

Credit by Examination

Credit by examination is possible through "test out" procedures developed by the various academic departments. Students must be enrolled during the test out term and will be charged a test out fee.

Transfer Credit

Graduate credit earned at another graduate school may be considered toward the fulfillment of program requirements provided that:

- They meet the Seven-Year limit policy.
- The institution is accredited at the graduate level.
- The course is offered for graduate credit and is applicable to a graduate program at the offering institution.
- The grade received was "B" (3.0) or higher.

To be applied to program requirements, transfer credits must be approved by the program director (*form 104-0123*). The total of these is limited to one-third of the minimum required credits for graduation from the program. Said credits will be posted on the UW-Stout transcript when two copies of official transcripts and a Request to Transfer form are filed in the Graduate Office. Only those credits to be used to meet program requirements will be transferred.

Credit may be transferred from those international institutions with which UW-Stout has entered into a formal transfer agreement. All other criteria listed here apply.

Research Requirement

All graduate programs require research preparation and activity. See the program descriptions for individual program requirements and options.

Residency Requirement

There are two ways of establishing residency. The first option requires that during at least one term, each student must earn a minimum of six credits on the UW-Stout campus. These credits cannot include the six-credit thesis or the six-credit field study. The second option is to participate in a series of intensive structured seminars. Students should consult with their program director regarding the availability of this option.

Load Limit

Graduate students may take a maximum of 16 credits per semester or 10 credits per 10-week Summer Session. Credits taken through continuing education, independent study, audit, internship, cooperative education or special topics are included in the maximum credit load. With the approval of the program director, a student may take a two-credit overload during a semester or a one-credit overload during one of the four-week summer sessions. Credit Overload Permit cards are available from the program director or in the Graduate Office.

Seven Year Limit

All course work and research used to meet program requirements must be completed within the seven-year period prior to graduation.

PROGRAM PROGRESS

Program Progress Review

Each student will be reviewed for program progress at the completion of each term.

A student admitted provisionally who completes all deficiencies will have provisional status removed upon the recommendation of the program director. A student who does not successfully complete deficiencies will be dropped from the university upon the recommendation of the program director.

Degree Candidacy

The Degree Candidacy Application (*form 104-0117*) initiates the process by which the Graduate College, in conjunction with the program director and the school dean, attests to the appropriateness of the program plan and the potential of the student to obtain the related academic and professional competencies. Candidacy must be approved before the Graduate Application for Degree is filed with the Graduate Office. At the time of filing, the following conditions must exist:

- a. The student is on full academic standing.
- b. The residency option has been identified.
- c. A program plan has been approved by the program director.

The Degree Candidacy Application must be accompanied by the Approved Program Plan. If transfer credit is involved, the Request to Transfer Credit (*form 104-0123*) and transcripts must be on file in the Graduate Office. Degree candidacy requires the approval of the program director, the dean (*or designate*) of the school within which the program is housed, and the associate dean for research and graduate studies.

Meeting the Research Requirement

Individual programs have various options for meeting the research requirement and the Graduate Office has assembled helpful corresponding information packets.

The candidate initiates the process by which the research adviser is identified and the research topic is approved by filing the Preliminary Statement and Appointment of Research Adviser (*form 104-1001A/B*) with the Graduate Office. If the investigation involves collecting information about people, file the Protection of Human Subjects in Graduate Student Research (*form 104-1013*), and a copy of the appropriate consent form, which must be submitted to and approved by the Subcommittee for the Protection of Human Subjects before data collection is begun. The Appointment of Committee Form (*form 104-1002*) is required for students who prepare a six-credit thesis or field study.

Research advisers must be members or associate members of the graduate faculty. See the back section of this Graduate Bulletin for a list of the Graduate Faculty.

The completed research report (*including the abstract*), in the accepted format, approved by the research adviser(s), and accompanied by the Statement of Permission (*form 104-1005*) or the Statement of Withholding Permission (*form 104-1006*), must be submitted to the Graduate Office on or before the last day of the term in which graduation is expected.

Upon the recommendation of the research adviser (*form 104-1008, Statement of Research Report with Limited Access*), the research report will be withheld from the Library Learning Center for a period of 12 months. With the approval of the Graduate Committee, the report may be withheld for an additional 12 months.

Graduation

Candidates must file a Graduate Application for Degree card with the Graduate Office at the beginning of the term in which they expect to graduate.

To file, the candidate must be on full academic standing and must meet all program requirements as specified in the Graduate Bulletin at the time that the program plan was approved by the program director. The Graduate Office and the program director will certify that all requirements have been met. The diploma will be mailed to the student four to eight weeks after the end of the term of graduation. Candidates that require certification of graduation earlier may request a letter stating such from the associate dean for research and graduate studies. A candidate will be recorded as "graduated" at the end of the term in which all program requirements were completed, including the filing of the research report in the Graduate Office.

Candidates may request to participate in the graduation ceremony if all requirements have been met except the filing of the research report. This assumes that the candidate has enrolled for the required research course. A request form is available from the Graduate College.

ACADEMIC STANDING

Review For Academic Standing

Students will be reviewed for academic standing at the end of each term.

Full-Time Status A student attempting nine or more credits (*credits attempted*) during a semester will be granted full-time student standing. To maintain full-time student standing, a student must demonstrate academic progress in a minimum of six of those credits (*credits which demonstrate academic progress*).

Academic Probation Full-time students who do not demonstrate academic progress will be placed on academic progress probation.

Part-Time Standing Full-time students on academic progress probation who do not demonstrate academic progress will be placed on part-time student standing and are subject to dismissal from the university. Credits attempted include all credits for which A, A-, B+, B, B-, C+, C, D, F, W, WS, WU, I, or IP were recorded. Credits which demonstrate academic progress include those credits for which A, A-, B+, B, B-, C+, C, or IP were recorded and research credits for which I's were recorded.

A student attempting eight or fewer credits during a semester, or five or fewer in a summer session, will be granted part-time student standing and will not be eligible for financial aid.

Grading System

Grade	Points	Description
A	4.00	Exceptional
A-	3.67	
B+	3.33	
B	3.00	
B-	2.67	
C+	2.33	Satisfactory
C	2.00	
D	1.00	Marginal
F	0.00	Unsatisfactory *
F	0.00	Failure *
I		Incomplete
IP		In Progress
AU		Audit *

* Grades D, F and AU are not applicable to program requirements.

Pass/Fail

Graduate students are not allowed to use the pass/fail system for any courses to be used to meet program requirements or for any courses identified as deficiencies at admission.

Incomplete - I

The grade "Incomplete" (I) may be given for failure to complete course work due to absence over which the student had no control. Incompletes not cleared within one year of the date of assignment, will be changed to an "F." To receive credit after that time, the student must re-register for the course.

In Progress - IP

The grade "In Progress" (IP) may be given for research and independent study credits in cases where the student has been working on the problem, but requires more time to complete it. If the IP grade is not cleared within two years of assignment, the student must re-register for the course.

Grade Point Average

All course work taken for graduate credit is counted in the calculation of the grade point average.

To maintain full academic standing, an accumulated grade point average of 3.0 for master's degree students and 3.25 for Ed.S. students, is required. If less than the minimum is attained, the student will be placed on probationary academic standing.

A student on probationary academic standing who attains the minimum accumulated grade point average on the next six or more credits, will be awarded full academic standing. A student on probationary academic standing who fails to attain the minimum accumulated grade point average on the next six or more credits, will be dropped from the university.

Students may repeat a course, but all grade points earned for the course, no matter how many times it is taken, will be counted in the calculation of the grade point average.

A student dropped from a graduate program is not eligible to enroll for graduate credit unless readmitted to a graduate program.



TEACHER EDUCATION

Professional Teacher Education

The School of Education and Human Services administers professional education programs at UW-Stout and is responsible for the preparation of teachers and other professional school personnel.

The Office of Teacher Education is responsible for all clinical programs, maintains appropriate student records, maintains appropriate records for accreditation and Wisconsin Department of Public Instruction program approval, and serves as a resource center for students, faculty, program directors and administrators. The director of the Office of Teacher Education is also the certification officer at UW-Stout.

You can find complete curriculum for specific teacher education programs in this bulletin under:

M.S. in Guidance and Counseling M.S. in Industrial/Technology Education M.S. in School Psychology

Graduate Certification Programs

Admission Requirements :

1. A cumulative grade point average in the bachelor's degree of not less than 2.75 on a 4.0 scale.
2. Completion of a minimum of four credits of English and two credits of speech in the bachelor's degree with a grade of at least a "C" (2.0) or completion of the following at UW-Stout:
 - a. College English - Teacher education students must have earned a grade of at least a "C" (2.0) in both English 326-101 and 326-102 or 326-111 and 326-112.
 - b. Speech proficiency - Must have earned a minimum grade of "C" (2.0) in 391-100, Fundamentals of Speech. This requirement may also be met by successful completion, grade of at least a "C" (2.0) of the written and oral portions of "The Speech Department Credit by Examination Procedure" for 391-100, or by successful completion of a second speech course selected from the following: 391-200, 391-206, 391-508 or 391-512.
3. All general admission requirements specified in the Graduate Bulletin.
4. All specific admission requirements specified by the program.

Certification:

Graduate-level certification programs at UW-Stout meet state certification requirements in Wisconsin. Programs will likely meet certification requirements in many, if not all, other states. However, certification varies by state (*some require state history or other course work*) and requirements change periodically. Therefore, students contemplating certification in another state may wish to clarify the acceptance of their program at UW-Stout with the state in which they plan to teach. The director of the Office of Teacher Education is the certifying officer at UW-Stout. Necessary forms and information concerning the certification process are available in the Office of Teacher Education.

Requirements You must meet the following requirements before certification can be recommended in a graduate certification program:

1. Graduation with a minimum grade point average of 3.0 in all course work except the clinical program (*clinical program is defined as all supervised experiences in a school setting which provide practical experience for the student, including prestudent teaching, student teaching, practicum and internship*).
2. Successful completion, minimum grade of "B" (3.0) of all clinical experiences.
3. A passing score on a standardized examination in each certification program completed and in which certification is desired. The standardized examination will be administered by the Department of Public Instruction. The passing score is determined by the State Superintendent of Public Instruction. (*Specific information concerning when and where this examination is administered may be obtained from the Office of Teacher Education.*)

RESOURCES AND SERVICES

Residence Halls and Dining Services

Nine coeducational residence halls provide accommodations for 2,900 undergraduate and graduate students. There is a residence hall designed for upperclassmen, graduate and non-traditional students. Some single rooms may be available during the academic year. During summer sessions, all students are assigned single rooms unless a specific roommate is requested. Applications for residence hall accommodations for the academic year or summer session should be requested directly from the Residence Life Office (170 Price Commons, 715/232-1121).

Student rooms are carpeted and furnished with a telephone, two single beds with innerspring mattresses, dressers, bookcases, desks and study chairs. The rooms are approximately 11 feet by 15 feet. Small rental refrigerators are available or students may bring their own. Microwaves, coffee makers, hot pots and popcorn poppers with unexposed elements are permitted in student rooms. No other cooking appliances, including frypans, hot plates or toasters, are permitted.

Residence halls have available for resident use many services and facilities. Personal computers with letter quality printers, and computer terminals which access the university's main academic computer and the Library Learning Center's computer, are in each hall. Through the use of these terminals, students can access the automated card catalog.

Also available in each hall are a laundry, television room, kitchenette, drafting tables, quiet-study rooms and a game room. There are five weight rooms and two saunas located in the residence halls available for resident's use. All these facilities are available to residents at no additional charge.

Each hall is staffed with a professional residence hall director and a student staff. The reception desks are open 22 hours per day and offer many services and a variety of equipment including typewriters, tools, change, vacuum cleaners, and cooking and sports equipment.

A wide variety of recreational, social and educational activities and programs are offered through the residence hall program.

Students who live on campus choose a dining service plan from a variety of options.

Inquiries for more information, including current rates, are invited by telephone or in person at the Residence Life Office, (170 Price Commons, 715/232-1121).

Off-Campus Housing

Graduate students who choose to live in off-campus housing may obtain information from a variety of sources. The Stout Student Association Office (141 Memorial Student Center, 715/232-1450) maintains a current list of off-campus housing. Other sources of local housing information are the *Dunn County News*, the *Menomonie Shopper* and the *Dunn County Reminder* which are available from local merchants.

Graduate students planning to live off campus will find it useful to visit Menomonie to secure the type of housing desired.

All dining service options available to residence hall students may be contracted for separately by off-campus students.

University Counseling Center

The University Counseling Center (Bowman Hall, 715/232-2468) provides counseling services for university students and referral for students and staff. Counseling services include individual counseling in personal, career and academic areas; group support and skill building experiences; and crisis intervention. The center also offers testing services, alcohol and other drug assessment and referral, Career Workshops, and outreach and training programs on a variety of topics.

Health Service

The Student Health Service (715/232-1314) is located at the north end of the campus across from Wigen Hall. The Health Service is open from 8 a.m. to noon and 1-4:30 p.m., Monday through Friday during the academic year. Standard examining and laboratory facilities are available. Appointments can be made by calling 232-1314. The Health Service is supported by a student health fee and only registered students are eligible for services. Services are not available during the summer session.

Students With Disabilities

If you are in need of special services, accommodations or academic adjustments because of a physical, hearing, visual, emotional or learning disability, you need to check with the Office of Services for Students with Disabilities (206 Bowman Hall, 715/232-2995) to inquire into and arrange for services. To ensure that services are available in a timely and consistent manner, UW System regent policy requires that each student contact the office as far in advance as possible, provide appropriate documentation of the disability, and seek funding for specialized support services (such as hearing aids, interpreters and individual prescribed devices).

Recreation

Recreation facilities include the Health and Physical Education Building (715/232-2224), Nelson Field and 10 outdoor lighted tennis courts. UW-Stout offers open recreation, intramurals and physical education instructional classes. The building provides courts for tennis, badminton, volleyball, basketball and archery, as well as facilities for weight training, gymnastics and dance, and swimming.

Additional recreational facilities include the Recreation Center (715/232-1611) housed in the lower level of the Memorial Student Center. The Recreation Center provides an eight-lane bowling facility, a video game room, a nine table billiards area, an outdoor equipment rental center, and a recreation resource center with recreation-oriented publication planning guides and brochures. The Recreation Center is also the informational center for clubs and sports organizations on campus.

Lake Menomonie, within the city, offers fishing, swimming, boating, canoeing and water skiing. Similar opportunities are available on nearby lakes. Ski enthusiasts will find excellent opportunities within commuting distance. Game hunting opportunities are found in the immediate vicinity. Menomonie Country Club and Rainbow Ridge Golf Club have nine-hole golf courses.

Veterans Service

Special assistance is given veterans by the Registrar's Office (107 Bowman Hall, 715/232-1640). This office provides veterans with current information on veterans affairs and maintains liaison with the Veterans Administration, Department of Veterans Affairs and the County Veterans Service Officer.

Placement and Co-op Services

Services for seniors, graduate students and alumni are provided by the Placement and Co-op Services Office (103 Administration Building, 715/232-1604). The goal of the office is to provide effective support to the placement efforts each individual makes in securing the best position. Effort is made to bring to the attention of candidates information about vacancies, trends in supply and demand, data about salaries and conditions of employment, and effective application techniques. Students are encouraged to attend group seminars or meet individually with a placement counselor.

Child Care Service

The School of Home Economics' Child and Family Study Center provides educational child care services for children from six weeks to six years of age. The center is open from 7:30 a.m. to 5:30 p.m., Monday-Friday, and in accordance with the university calendar year. The center offers full day (7:30 a.m. – 5:30 p.m.), morning (7:30 a.m. – 12:30 p.m.) and afternoon (1:30 p.m. – 5:30 p.m.) sessions with two to five days a week options. For more information about enrollment, contact the Child and Family Study Center, UW-Stout, Menomonie, Wisconsin 54751, 715/232-1478. Priority is given to student parents and university employees.

Library Learning Center

The Library Learning Center provides users with rapid, efficient access to information in both traditional and electronic formats. Integrated end user databases coupled with an online public access catalog and Internet connectivity provide immediate access to worldwide information databases. These include the Online Computer Library Center's (OCLC) FIRST SEARCH, numerous U.S. and world catalogs, and various Freetnet accesses. Library users will find 218,200 volumes; 1,539 periodicals and journal subscriptions; 968,223 microformats; 13,815 audiovisual items; and numerous CD-ROM databases. Library information and access is generally free to users. The library is open 95 hours per week. Two microcomputing laboratories with more than 100 workstations are also available to users.

Textbooks

Graduate students may be required by their instructors to purchase textbooks and other classroom resources, or may be given the option of renting. Check with your instructors. Instructional Resources Service provides required textbooks and other classroom resources with the exception of consumables such as small paperbacks, workbooks and laboratory manuals. Consumable materials may be purchased directly from the University Bookstore.

Computer Services

Academic Computer Services provides computer support for graduate student and faculty research. Services provided include statistical consulting, programming assistance, data preparation for statistical analysis and optical scanning of mark-sense forms. A Digital Equipment Corporation computer is available for on-line computation, with terminals located in classroom buildings, the Library Learning Center and all residence halls. Dial-up access is provided for remote use. Research support and electronic mail services are available through state, national, and international high-speed data networks. All services are provided free for graduate student unfunded research.

Instructional Technology Services

Instructional Technology Services is housed in the Communications Center. Professional media specialists provide staff and students with consultation and services in areas of instructional development, media design, utilization, media equipment and facilities; production of still and motion picture photography, graphics, instructional television, and audio recording.

Telecommunications

Telecommunications and Technical Support Services is housed in the Communications Center. Technical specialists provide the campus with consultation and service in the areas of telecommunications (*video, data and voice*) plus maintenance of most media equipment, microcomputers, telephones and network services.

Teleproduction Center

The Stout Teleproduction Center produces television programming for broadcast on the Wisconsin Public Television Network, as well as provision for other state educational organizations and non-profit agencies. The Teleproduction Center also provides satellite uplinking and associated production services for agencies and institutions wishing to originate interactive satellite teleconferences from West Central Wisconsin.

Parking

Parking spaces are available in campus parking lots. A permit is required to use any non-metered campus parking lot. Permits are available from the Parking Office (University Services Building, 817 S. Broadway). For more information, contact the Parking Office (715/232-1792).

Glossary

Academic Probation

A condition of attendance under which students are allowed to remain at the university with the understanding that they meet set academic standards within a set period of time. Failure to meet the standard results in dismissal from the university.

Add and Drop

The process of changing a course schedule by dropping or adding a course during the prescribed time at the beginning of each semester.

Audit

Students register and attend class, but do not take examinations. No credit hours are earned, and the cost of the class is less than regular tuition. "AU" will appear on the grade record.

Bachelor's Degree

The degree received after completing a specific program of undergraduate study and fulfilling all graduation requirements.

Certification

A recognition of professional achievement bestowed by an outside organization.

Class Load

The number of credit hours carried by a student each semester.

Concentration

A component within a degree program that examines a selected area of the student's chosen professional field in greater detail. A concentration may be part of the university's planned offerings or designed by the student.

Corequisite

A course that must be taken at the same time as another course.

Credit Hour

A measure of academic work. One credit hour usually represents one hour of class time per week plus two hours of out of class study.

Credit Load

The number of credits a student registers for during a semester.

Degree Program

A planned program of study leading to a master's or education specialist's degree.

Degree-Seeking Student

A student who has been admitted to a degree program and is seeking a master's or education specialist's degree.

Disadvantaged

Deprived of basic social rights and security through poverty, discrimination, or other unfavorable circumstances.

Educationally Disadvantaged

Deprived of a socially adequate education through poverty, discrimination, or other unfavorable circumstances.

Elective

A course taken at the choice of the student. If the electives are in the general education component of a degree program, they must be general education courses.

Emphasis

A designated group of courses within a degree program that affords increased exposure to a specific area in the student's chosen professional field.

Full Time Student

A graduate student who enrolls for at least 9 credits during the fall or spring semester.

Good Standing

Maintaining an academic record that meets UW-Stout's requirements, eligible to continue at or return to the university, or to transfer to another institution.

Grade Point

The numerical value given to letter grades, based on an "A" receiving four points, a "B" three points, and so on.

Grade Point Average (GPA)

The numerical value assigned to a student's scholastic average, computed by dividing the total grade points by the total credit hours attempted.

Grant

Financial assistance that does not have to be repaid.

Hold

A barrier placed on a student's ability to register for classes or receive transcripts as a result of unpaid monetary obligation or other action by the university.

Incomplete

The grade assigned only if a student is temporarily unable to complete course requirements because of unusual circumstances.

Independent Study

A course of study designed by a student and undertaken outside the classroom, under the supervision of one or more faculty.

Interdisciplinary

Drawing on two or more disciplines in a single course or program.

Internship

Work in a company or agency related to a student's degree program and career plans, usually for academic credit and often also for payment.

Major

A planned program of study leading to a master's or education specialist's degree. Term is often used interchangeably with degree program.

Major studies

A component within a degree program that provides fundamental education for a particular career discipline.

Practicum

Directed work experience related to a program of study.

Prerequisite

A course or experience that must be successfully completed before enrollment in a designated course.

Professional Electives

Required credits that are not prescribed by the program by designation of a specific course, but that are professional and specific in their content as they pertain to the major.

Registration

The process of enrolling in and paying for courses each semester.

School

An administrative division of the university housing academic departments, degree programs and other administrative units. At UW-Stout these are the School of Education and Human Services, the School of Home Economics, the School of Industry and Technology, and the School of Liberal Studies.

Selectives

A group of courses from which a student must choose a prescribed number of credits to meet a program requirement.

Semester

A unit of time, generally 16 weeks long, in the academic calendar.

Specialization

A specialization is a program of study, with carefully constructed learning goals and experiences, and evaluation procedures. UW-Stout offers specializations in Futures Studies, International Studies, Professional Writing, Public Relations/Public Information, and Training and Human Resource Development.

Transcript

An official copy of a student's permanent academic record.

Transfer Credit

Academic credit earned at another accredited institution and accepted toward a UW-Stout degree.

Tuition

The amount of money that must be paid for a course.

Master of Science Degree Programs



EDUCATION

Dr. Donald Stephenson, Program Director, 428 Education and Human Services Building, 715/232-1310

Introduction

Master of Science Degree The purpose of the education program is to prepare individuals to work as professional teachers. The focus of the course work in the program is on the learner, teacher behavior, teaching-learning processes, research and evaluation. The program is open to professionals who provide instruction in any discipline or work with learners at any age level. The open concentration provides flexibility for students to choose course work which promotes their professional development goals.

Admission

To be admitted with full status to this program, the applicant must (1) hold a bachelor's degree from an accredited institution; (2) have an overall grade point average of at least 2.75, or an average of at least 2.90 in the last one-half of the undergraduate work.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; related work experience; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; (c) satisfactory completion of thesis or problems in education; and (d) a course distribution as outlined here:

Preparation in Research

XXX-6XX	Transformational Leadership and Organizational Climate	1
421-729	Introduction to Educational Research	1
421-740	Research Foundations	4
421-750	Curriculum Theory and Practice	2-3
421-765	Problems in Education or	
421-770	Thesis	2-6

Preparation Basic to Program

421-7XX	Instructional Analysis	4
421-744	Seminar in Education	1-3
429-730	Advanced Psychology of Learning	2

Electives

(8-12 credits)

FOOD SCIENCE AND NUTRITION

Dr. Janice Timmer, Program Director, 205 Home Economics Building, 715/232-2183

Introduction

Master of Science Degree The goal of this program is to increase professional proficiency, to introduce research procedures and to promote precision in communication. Those who complete the academic requirements for this advanced degree should be able to think more independently and to respond intelligently to challenging ideas. The program prepares students for advanced positions in teaching, dietetics, a wide range of opportunities in business and industry, and further education. An approved Preprofessional Practice Program (AP4) is available for those interested in pursuing dietetic registration. Programs of study are individualized in consultation with the program director to meet the students' needs and goals.

Learning experiences include traditional classes, clinical experience in health care and community agencies, businesses, field trips, laboratory experimentation, thesis, research paper, and seminar participation. All students participate in weekly research presentations by faculty and fellow students and are encouraged to present their research at the annual Graduate Research Day.

Admission

To be admitted to this program with full status, the applicant must have a bachelor's degree from an accredited college or university, with courses in organic and biochemistry, microbiology, physiology, foods and advanced nutrition, and have an overall grade point average of at least 3.0. Applicants with a grade point average between 2.5 and 3.0 may qualify for probationary admission.

Students from a variety of educational backgrounds are eligible for admission. In addition to home economics majors, students from the biological, chemical and social sciences will find appropriate applications within the program. Students who do not have a course in European or American foods, will be required to take a beginning foods course as a deficiency.

A deficiency in these admission requirements does not preclude admission, but may necessitate completion of additional undergraduate courses and/or increase the number of graduate credits required to earn the degree.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; degree candidacy; research topic approval; and intent to graduate.

Requirements

The requirements for this degree include the following:

(a) completion of at least 30 semester credits with an overall grade point average of 3.0 or better; (b) inclusion of a minimum of 15 of the 30 credits in courses open only to graduate students—700 level; (c) approval of degree candidacy at the appropriate time; and (d) completion of the research and professional requirements.

Research Preparation

6-10 credits

229-770	Thesis in Food Science and Nutrition or	
229-747	Problems in Food Science and Nutrition	2-6
421-740	Research Foundations	4
<i>A concentration may be selected from the following or patterns of advisement developed in consultation with the program director to meet individual needs of the student. All advisement patterns include the research preparation requirements.</i>		

Professional Preparation

14-24 credits

Select 14-24 credits from concentration A, B or C, or 20-24 credits from concentration D or E.

A. Foods

14-24 credits

229-620	Food Styling	1-3
229-638	Experimental Foods	3
229-650	Food Processing	3
229-661	Multicultural Aspects of Food and Nutrition Patterns	3
229-701	Trends in Nutrition	1-2
229-706	Instructional Techniques in Food Systems	2
229-708	Food Seminar	2
229-715	Menu Analysis and Planning	3
229-720	Workshop in Foods	1
229-725	History of Food	3
229-740	Food Preservation Technology	3
229-742	Sensory Evaluation of Food	3
229-746	Food Innovations	2-3
229-756	Advanced Experimental Foods	3-4
229-799	Independent Study	1-3
308-506	Food Microbiology	3
311-515	Food Chemistry	3
311-535	Instrumental Methods of Analysis	3

B. Nutrition

14-24 credits

229-606	Nutrition Education	3
229-618	Diet Therapy	4
229-630	Food Behavior	3
229-633	Maternal and Child Nutrition	3
229-701	Trends in Nutrition	1-2
229-702	Minerals and Vitamins	3
229-705	Geriatric Nutrition	2
229-710	Clinical Nutrition	3
229-711	Nutrition Seminar	2
229-712	Practicum in Community Nutrition Programs	1-2
229-721	Workshop in Nutrition	1
229-729	Proteins	3
229-736	Carbohydrates and Lipids	3
229-799	Independent Study	1-3

C. Food and Nutrition

14-24 credits

In consultation with the program director, select courses from concentrations A and B with a minimum of 5 credits from the concentration of lesser interest.

D. Food and Food Service Administration**20-24 credits****Food (8-10 credits)**

229-620	Food Styling	1-3
229-638	Experimental Foods	3
229-661	Multicultural Aspects of Food and Nutrition Patterns	3
229-708	Food Seminar	2
229-720	Workshop in Foods	1
229-725	History of Food	3
229-740	Food Preservation Technology	3
229-742	Sensory Evaluation of Food	3
229-746	Food Innovations	2-3
229-756	Advanced Experimental Food	3-4

Food Service Administration (12-14 credits)

150-600	Organizational Leadership	3
229-701	Trends in Nutrition	1-2
229-706	Instructional Techniques in Food Systems	2
229-715	Menu Analysis and Planning	3
245-521	Food Service Equipment	2
245-626	Hospitality Industry—Employee and Labor Relations	2
245-656	Microwave Oven	2
245-670	Hospitality—Financial Analysis/Budget/Forecasting	3
245-700	Management Concepts in Food Administration	1
245-701	Food Service Administration Management—Implementation	1
245-702	Operational Controls in Food Service Management	1
245-703	Seminar in Analysis of Food Service Management	3
354-741	Computer Programming Techniques*	2

Those who have not taken 245-501 or 245-513 or the equivalent will be required to take these courses in addition to the concentration requirements.

*Not required of those who have had the undergraduate equivalent experience.

E. Nutrition and Food Service Administration**20-24 credits****Nutrition (8-10 credits)**

229-633	Maternal and Child Nutrition	3
229-702	Minerals and Vitamins	3
229-705	Geriatric Nutrition	2
229-710	Clinical Nutrition	3
229-721	Workshop in Nutrition	1
229-729	Proteins	3
229-736	Carbohydrates and Lipids	3

Food Service Administration (12-14 credits)

150-600	Organizational Leadership	3
229-701	Trends in Nutrition	1-2
229-706	Instructional Techniques in Food Systems	2
229-715	Menu Analysis and Planning	3
245-521	Food Service Equipment	2
245-626	Hospitality Industry—Employee and Labor Relations	2
245-656	Microwave Oven	2
245-670	Hospitality—Financial Analysis/Budget/Forecasting	3
245-700	Management Concepts in Food Administration	1
245-701	Food Service Administration Management—Implementation	1
245-702	Operational Controls in Food Service Management	1
245-703	Seminar in Analysis of Food Service Management	3
354-741	Computer Programming Techniques*	2

Those who have not taken 245-501 or 245-513 or the equivalent will be required to take those courses in addition to the concentration requirements.

*Not required of those who have had the undergraduate equivalent experience.

Preparation for Further Development**0-10 credits**

Electives are selected according to the candidate's background, interests and objectives. Frequently, courses are chosen from other areas of home economics or from the following fields: business administration, biology, chemistry, economics, education, English, journalism, applied mathematics, mathematics, physics, psychology, sociology, speech, vocational rehabilitation, industrial management and media technology.

GUIDANCE AND COUNSELING

Dr. Arlene Cooper, Program Director—Mental Health Counseling Concentration, 230 Vocational Rehabilitation Building, 715/232-1305

Dr. Sue Stephenson, Program Director—School Counseling Concentration, 229 Vocational Rehabilitation Building, 715/232-2619

Introduction

Master of Science Degree The program in guidance and counseling provides a basic preparation in counseling. The school counseling concentration can lead to certification by the State of Wisconsin for school counseling and employment in the public schools. The mental health counseling concentration leads to employment in a counseling position in other clinic and agency settings.

Students who seek certification from the Wisconsin Department of Public Instruction must meet both elementary and secondary requirements for certification as a school counselor on a K-12 basis, or they may choose either the elementary or the secondary option. Students desiring to be certified for counseling positions in the Vocational, Technical and Adult Education System, and who can meet the teacher certification and experience requirement for that system, may elect to follow the secondary certification program.

Students interested in community, mental health agency, or alcohol and drug abuse counseling should apply for the concentration in mental health.

Learning experiences in the immediate professional setting include supervised counseling practicum and, in some concentrations, an internship.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.25, but less than 2.75. These exceptions are subject to a strict limit of 10 percent of the students in the program and must be individually negotiated with the recommendation of the program director and the approval of the Graduate College.

Both the Graduate College Application form (*obtainable from the Graduate College*) and a Program Application form (*obtainable from the program director*) must be submitted by each applicant, including the documents identified on these two forms. Applicants must have presented and filed all required admissions documents and secured a personal interview with the faculty and program director by February 1 of the year enrollment is planned. After committee review, notification of acceptance will be made by May 1. The process and deadlines for selecting applicants will be strictly followed in each case.

Students will be admitted on the basis of academic performance, admissibility to the Graduate College, recommendations and rankings of a screening committee. These rankings are based on:

1. Experience in a helping profession, i.e., counseling, education, social work, psychology and volunteer activities.
2. Letters of recommendation from employers, instructors and consumers of services provided by the applicant.
3. An autobiographical statement in which the applicant has outlined assets and liabilities as a potential counselor trainee.
4. A personal interview with the program director and faculty.

Requirements

The requirements for the degree with the school counseling concentration requires a minimum of 36 credit hours, based on experience or previous course work, but may involve as many as 76 credits. The degree with the mental health counseling concentration requires 48 semester hours. Transfer and/or waived credits for the mental health counseling concentration may not exceed 12 (*which could result in a 36-credit minimum degree*). Students must also be approved for degree candidacy at the appropriate time and follow the approved program plan outlined here:

Core Requirements

21-27 credits

Concentrations in Elementary and/or Secondary School Counseling, and Counseling have the following courses as core requirements:

413-675	Counseling Theory	2
413-731	Problems in Counseling and Psychological Services (Plan B) or	
413-770	Thesis (Plan A) or	
500-735	Investigations	2-6
413-752	Group Dynamics	2
413-788	Counseling Process Lab	3
413-790	Supervised Counseling Practicum or	
413-775	AODA Practicum or	
413-797	Mental Health Practicum	6-8
421-740	Research Foundations	4
489-753	Psychometric Theory and Application	2

Concentrations

Mental Health Counseling Concentration

Counseling Requirements (18 credits)

212-750	Systems of Marriage and Family Therapy	3
413-666	Alcoholism and Family Systems Intervention	2
413-715	Orientation to Mental Health Counseling	1
413-721	Alcohol and Drug Abuse Treatment Programs	3
413-723	Psychopathology: Assessment and Treatment Planning	3
413-725	Counseling With Special Populations	3
413-789	Cognitive Behavioral Therapy	3

Electives* (8-10 credits)

212-660	Current Topics in Sexuality	1
212-715	Theories of Family Processes	2
212-751	Seminar in Marriage and Family Therapy	3
212-760	Sex Therapy Seminar	2
303-610	The Anthropological Study of Family Systems	3
413-694	Counseling Older Persons	2
413-705	Play Therapy	2
413-718	Shame, Addiction and Substance Abuse	3
413-733	Career Development	2
413-760	Theories of Behavior Modification	2
421-536	Multiculturalism	2
459-509	Introduction to Biofeedback	3
479-561	Abnormal Psychology	3
479-571	Introduction to Health Psychology	3
479-574	Psychology of Women	2
479-673	Psychology of Stress	2
479-760	Personality	2
479-850	Psychology of Development	3

*Electives are not limited to the courses listed. Any graduate level course may be elected with the approval of the program director.

School Counseling Concentration**Elementary and/or Secondary School****General Certification Requirements (19 credits)**

387-710 Sociological Foundations for Guidance	3
413-647 Behavior Problems of Children	2
413-666 Alcoholism and Family Systems Intervention	2
413-733 Career Development Process and Issues	2
413-733A Career Information Lab	1
413-765 Organization and Administration of Guidance	3
431-630 Mainstreaming the Special Student	3
479-760 Personality	2
489-753A Guidance Lab	1

Additional Certification Requirements**Elementary School Counseling Only**

413-629 Guidance in the Elementary School	2
413-705 Play Therapy	2
489-251 Child Psychology or	
479-850 Psychology of Development*	3

Secondary School Counseling Concentration Only

413-787 Career Placement Services	1
479-552 Adolescent Psychology or	
479-850 Psychology of Development*	3

*May be used to satisfy both child and adolescent psychology requirements at K-12 Certification level.

K-12 School Counseling

Students who wish to be endorsed for all levels of school counseling must meet all the requirements of both the elementary and secondary concentrations. In addition, the practicum placement, consisting of 300 hours of supervised counseling, will be divided between an elementary school and a secondary school placement.

Internship Requirements

Students who will attain K-12 school counselor certification in Wisconsin and some other states through the internship are required to meet some minimum competencies in areas of teacher preparation dealing with curriculum development, organization of schools, the politics of education and the teaching-learning process. The following three courses enable the students to meet these competency areas. Substitutions or waivers may be made for students with previous equivalent course work or experience.

421-536 Multiculturalism: Issues and Perspectives	2
421-726 Administration	2
421-750 Curriculum Theory and Practice	2

Preparation for Further Development

Students who already hold a master's degree in some field of education, but who are not certifiable for counseling, may choose to meet certification requirements without the necessity of completing a second master's degree. The program director will evaluate transcripts and identify those courses that will be necessary for endorsement as a school counselor. Students seeking certification only must still apply for admission to the program.

Full Time or Part Time Study

Extended field placement (*practicum*) required in these programs consists of 300 hours for one semester in the school certification concentrations. Part-time study while holding a full-time job is very difficult unless the employment provides considerable flexibility. The practicum may not be completed in the summer session because the time available is not extensive enough and regular school placements are not available. Therefore, full-time study for at least one calendar year is recommended. A substantial portion of all concentrations may be completed part time by attending summer sessions and during the regular semesters for late afternoon and evening classes. However, a commitment for at least one semester may be required at the point where the student is ready for the practicum field placement.

HOME ECONOMICS

Dr. Karen Zimmerman, Program Director, 117 Home Economics Building, 715/232-2530 or -1463

Introduction

Master of Science Degree The home economics program offers six concentrations: Home Economics Education; Home Economics/Family Life Education; Child/Family Services; Clothing, Textiles and Retail Marketing; Post-Secondary Certification; and the degree without concentration (*open concentration*). Each student's program is individually planned with the program director.

The **Child/Family Services** concentration provides an opportunity for persons wishing to prepare for positions in child care administration, resource and referral, or teaching young children. Course work is also available to obtain Wisconsin certification for teaching grades 1-3 for students who already have obtained a bachelor's degree in Early Childhood Education from UW-Stout prior to 1990.

The **Clothing, Textiles and Retail Marketing** concentration provides an opportunity for development of professional competencies in clothing, textiles, textile design, and/or retail marketing. It prepares students for professional positions in business, merchandising, industry or extension services, or provides concentrated study for persons planning to teach at the secondary, post-secondary or college level.

The **Home Economics Education** concentration provides an opportunity for persons who are in or wish to prepare for a position which requires knowledge of several or all substantive areas of home economics. Secondary and post-secondary teachers, as well as extension agents, frequently choose this concentration.

The **Home Economics/Family Life Education** concentration is designed for students preparing to meet the certification requirements for the Department of Public Instruction. This concentration has been designed to allow students to complete the certification requirements to teach secondary home economics in Wisconsin; specifically, it provides an internship to meet the student teaching requirement.

The **Post-Secondary Certification** concentration provides an opportunity to increase the professional competence of students who plan to teach in a post-secondary or high school; coordinate, supervise, or administer vocational programs.

The **degree without concentration** is flexible and provides for those persons whose career interests do not relate to the other five concentrations. It is designed for those individuals who wish to prepare for a home economics position which requires in-depth knowledge in one or several subspecialty areas of home economics.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; student advisement; residency; program plan; and intent to graduate.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. This bachelor's degree will generally have been earned in the major areas of home economics educational services.

Requirements

The requirements for this degree include completion of at least 30 hours of graduate credit with an overall grade point average of 3.0 or better. A minimum of 15 credits must be in courses open only to graduate students—700 or 800 level.

All of the concentrations and the degree without concentration require courses in substantive areas of home economics: Avocational Education, Child Development, Clothing and Textiles, Consumer Education, Family Life, Foods and Nutrition, Home Equipment, Home Management, Hospitality, Habitat, Parenting and Human Development, and Early Childhood.

Child/Family Services Concentration

30 credits

Research Preparation (6-10 credits)

242-770	Thesis Home Economics	or
242-775	Problems in Home Economics	2-6
421-740	Research Foundations	4

Professional Core (4 credits)

200-700	Trends in Home Economics	2
212-7XX	Seminar in Child/Family Services	2

*Professional Education (16-20 credits)

242-708	Curriculum Studies in Home Economics	2
242-710	Applied Evaluation in Home Economics	2
XXX-XXX	Electives related to student's professional goals	12-16

*Substantive Areas of Home Economics (16-20 credits)

A minimum of 10 credits must be taken in courses related to the Child and Family Study course.

Clothing, Textiles and Retail Marketing Concentration

30 credits

Research Preparation (6-10 credits)

214-768	Problems in Clothing, Textiles and Retail Marketing	or
214-769	Design Option Thesis	or
214-770	Thesis - Clothing, Textiles and Retail Marketing	2-6
421-740	Research Foundations	4

Professional Core (4 credits)

200-700	Trends in Home Economics	2
214-790	Seminar in Textiles, Clothing and Retail Marketing	2

*Substantive Areas of Home Economics (16-20 credits)

10 credits must be in Clothing, Textiles and Retail Marketing courses.

Home Economics Education Concentration

30 credits

Research Preparation (6-10 credits)

242-770	Thesis—Home Economics	or
242-775	Problems in Home Economics	2-6
421-740	Research Foundations	4

Professional Core (4 credits)

200-700	Trends in Home Economics	2
242-744	Seminar in Home Economics Education	1-2

*Professional Education (6-14 credits)

242-708	Curriculum Studies in Home Economics	2
242-710	Applied Evaluation in Home Economics	2
XXX-XXX	Any approved electives	6-12

*Substantive Areas of Home Economics (6-14 credits)

Home Economics/Family Life Education Concentration**34 credits****Research Preparation (6-10 credits)**

242-770 Thesis-Home Economics or	
242-775 Problems in Home Economics	2-6
421-740 Research Foundations	4

Professional Core (4 credits)

200-700 Trends in Home Economics	2
242-744 Seminar in Home Economics	1-2

***Professional Education (6-14 credits)**

242-708 Curriculum Studies in Home Economics	2
242-710 Applied Evaluation in Home Economics	2
XXX-XXX Graduate Internship in Home Economics	8
XXX-XXX Electives related to student's professional goals	0-2

***Substantive Areas of Home Economics (6-14 credits)**

The human relations code must be met if course work is not completed at the undergraduate level.

Post-Secondary Certification Concentration**30 credits****Research Preparation (6-10 credits)**

242-770 Thesis-Home Economics or	
242-775 Problems in Home Economics	2-6
421-740 Research Foundations	4

Professional Core (4 credits)

200-700 Trends in Home Economics	2
242-744 Seminar in Home Economics Education	1-2

***Professional Education (10-14 credits)**

199-502 Principles of Vocational, Technical and Adult Education	2
199-710 Coordination and Supervision of Vocational Education	2
242-708 Curriculum Studies in Home Economics	2
242-710 Applied Evaluation in Home Economics	2
413-501 Introduction to Guidance	2
421-714 Teaching Strategies	4
479-730 Advanced Psychology of Learning	2
XXX-XXX Electives related to student's professional goals	2-12

***Substantive Areas of Home Economics (6-8 credits)**

The human relations code must be met if course work is not completed at the undergraduate level.

Degree without Concentration**30 credits****Research Preparation (6-10 credits)**

242-770 Thesis Home Economics or	
242-775 Problems in Home Economics	2-6
421-740 Research Foundations	4

Professional Core (4 credits)

200-700 Trends in Home Economics	2
XXX-XXX Seminar	2

***Substantive Areas of Home Economics (16-20 credits)**

* Courses must be approved by the program director.

HOSPITALITY AND TOURISM

Dr. Randall Upchurch, Program Director, 439 Home Economics Building, 715/232-1407

Introduction

Master of Science Degree The hospitality and tourism graduate program is designed for persons desiring to enhance their management and research skills. The program goal is to challenge students with an educational experience that will prepare them to make significant contributions as management professionals.

Both concentrations are broad-based to anticipate rapid changes evident in the industry. Entering students bring the perspectives of varied educational and employment backgrounds. Program graduates enjoy diverse career opportunities in teaching; in state, national and international agencies; and in private industry trade associations. At the completion of this program, graduate students will have enhanced their management abilities through:

1. Understanding societal needs for leisure and business travel activities, and the requirements for implementing hospitality and tourism programs responsive to these needs.
2. Developing the capability to resolve problems at the management level of hospitality and tourism organization.
3. Conducting and interpreting intra- and interdisciplinary research.
4. Acquiring a knowledge of literature germane to hospitality and tourism.
5. Understanding the network of relationships among the components of hospitality and tourism, including impacts on the host society.
6. Identifying leading state, national and international organizations in hospitality and tourism.
7. Acquiring knowledge of sources of information germane to hospitality and tourism.
8. Applying computer capabilities to hospitality and tourism problems.

Admission

To be admitted with full status to this program, the applicant must (1) hold a bachelor's degree from an accredited institution; (2) have an overall grade point average of at least 3.0 on a 4.0 scale [A = 4]; (3) International students must score a minimum of 550 on the TOEFL.

This program is designed for applicants with an undergraduate major in hotel and restaurant or tourism management, or equivalent. However, applicants with bachelor's degrees in such fields as economics, anthropology, geography, marketing, business administration, recreation or foreign languages are welcome. The records of applicants holding undergraduate degrees in these and other majors will be evaluated. Those applicants whose preparation for the program is deemed to be deficient will be required to complete additional work, which may be at the undergraduate level, prior to being fully admitted to this graduate program.

Students seeking full admission to the program will be expected to have had one course in each of the following areas or equivalent experience:

- Accounting
- Restaurant operation
- Introduction of tourism
- Economics
- Lodging administration
- Sociology or Anthropology
- Food service administration
- Development of tourism or of tourism goods and services

Students are advised to complete the application process by May 1 for Summer and Fall terms, and by October 1 for the Spring term. However, late applications may be considered if there are openings. Both a Graduate College application form and a program application form are required. All required admission documents, including official transcripts of all previous graduate and undergraduate work completed, should be received by the Graduate Office by these dates.

Students will be admitted on the basis of academic performance and other factors appropriate for consideration as follows:

- a. work experience in the hospitality and tourism industry.
- b. letters of recommendation from employers and/or previous instructors.
- c. ratings of the applicant as judged by a screening committee and program director's recommendation.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; program seminar; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include (a) completion of at least 36 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students—700-800 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Required courses

13-16 credits

245-710	Issues in Hospitality and Tourism	2
245-747	Hospitality and Tourism Research Interpretation	3
245-780	Seminar in Hospitality and Tourism	1
245-789	Thesis—Hospitality and Tourism (Plan A)	6
421-740	Research Foundations	4

Choose either Hospitality or Tourism as a concentration.

Concentrations

Hospitality Concentration

10 credits

229-620	Food Styling	1-3
229-661	Multicultural Aspects of Food and Nutrition Patterns	3
245-515	Lodging Administration	3
245-625	Hospitality Industry Law and Liability	3
245-626	Hospitality Industry—Employee and Labor Relations	2
245-670	Hospitality—Financial Analysis/Budget/Forecasting	3
245-681	Special Problems in Hospitality and Tourism	2
245-682	Hospitality and the Handicapped Traveler	1
245-700	Management Concepts in Food Administration	1
245-701	Food Service Administration Management—Implementation	1
245-702	Operational Controls in Food Service Management	1
245-799	Independent Study	1-3

Tourism Concentration

10 credits

245-640	Sociocultural System of Tourism*	3
245-644	Resort Planning and Operation	3
245-645	Geography of Tourism	3
245-681	Special Problems in Hospitality and Tourism	2
245-682	Hospitality and the Handicapped Traveler	1
245-799	Independent Study	1-3
300-575	The Ascent of Man	2
326-305	American Regional Literature	3
387-525	Sociology of Leisure	3

*Required course

Selectives

10-13 credits

120-180	Microcomputer Applications – Words/Data	2
150-600	Organizational Leadership	3
150-700	Systems Analysis and Design	3
160-585	International Marketing	3
160-679	Marketing Research	3
160-690	Administration and Business Policies	3
245-640	Sociocultural System of Tourism	3
245-681	Special Problems in Hospitality and Tourism	2
320-680	International Trade	3
326-515	Technical Writing	3
354-530	Statistical Methods	3
387-525	Sociology of Leisure	3
421-714	Teaching Strategies	4
421-750	Curriculum Theory and Practice	2-3
479-679	Advanced Public Relations	2
479-582	Human Resource Management	3
XXX-XXX	Any approved electives	5

INDUSTRIAL/TECHNOLOGY EDUCATION

Dr. Leonard Sterry, Program Director, 140 Communication Technologies Building, 715/232-1367

Introduction

Master of Science Degree. This program is especially designed for individuals with undergraduate preparation in industrial arts, industrial education, technology education and related fields. However, it is also open to others interested in entering the industrial education field.

The program provides opportunities for students to expand their knowledge and competence in industrial education and technology education. Specifically, this program will provide students the opportunity to:

1. Understand the history, issues and philosophy of industrial/technology education.
2. Develop or expand competence in curriculum development.
3. Understand and apply learning theory to develop teaching strategies suitable for teaching in classroom and laboratory or work settings.
4. Develop effective interpersonal relationship skills.
5. Develop or expand the ability to organize, manage and maintain an industrial/technology education laboratory or work environment.
6. Design and use evaluation instruments and procedures.
7. Develop or expand competence in technical areas suitable for teaching industrial/technology education.
8. Understand and be able to utilize information gained from technical and educational research.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree in industrial arts education or technology education (or equivalent) from an accredited college and have an overall grade point average of at least 2.75. This assumes preparation and certification (or eligibility for certification) for teaching industrial arts or technology education.

A deficiency in these admission requirements does not preclude admission, but it may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn the degree.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; degree candidacy; and intent to graduate.

Requirements

Requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students-700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as follows:

Preparation in Research

7-11 credits

190-739	Introduction to Research in Vocational/Technology Education	1
421-740	Research Foundations	4
<i>The following two options are available for the research experience, each involving a research report:</i>		
190-735	Problems in Industrial/Technology Education	2
190-770	Thesis - Industrial/Technology Education	6

Preparation Basic to Program

14 credits

190-704	History/Philosophy of Technology Education	2
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Select at least one from each cluster:

Cluster 1. Foundations in Philosophy or Psychology

190-708	Issues in Technology Education	2
195-532	Futures of Technology	2
421-700	Philosophy of Modern Education	2
421-705	Social Thought of American Educators	2
479-730	Advanced Psychology of Learning	2

Cluster 2. Facilitation and Management of Learning

190-533	Technical/Vocational Planning Laboratories	2
190-606	Activities in Technology/Vocational Education	2
190-637	Organization and Management of Technical Laboratories	2
421-690	Learning Style Theory and Application	2
421-714	Teaching Strategies	4
XXX-XXX	Graduate level computer course	

Cluster 3. Evaluation

421-641	Education Evaluation	2
421-742	Program Evaluation	3

Cluster 4. Technical Research

XXX-XXX	Problems in (technical area)	2-6
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Select at least two from this cluster:

Cluster 5. Curriculum and Program Development

120-740	Instructional Development*	2
190-530	Implementing Technology Education	3
190-638	Course Construction*	2
190-710	Curricular Innovations in Technology Education	2
199-674	Adult Education	2
421-750	Curriculum Theory and Practice	2-3

*May take either, but not both.

Preparation for Further Development

For students planning careers in teaching, it is recommended that their technical work (*graduate and undergraduate*) total at least 45 semester hours. Additional electives will be selected with approval of the graduate program director. A complete list of graduate work appropriate to this degree program is maintained by the program director.

Preparation Through Advisement Patterns

This program is designed so that at least one of a variety of advisement patterns can be developed within the framework of the industrial education degree programs. Beyond the preparation in research (7-11 credits) and preparation basic to the program (14 credits), students will choose, in consultation with their program director, an advisement pattern supporting their work-role/life-role goals and select learning experiences (*course work*) which will support them in such areas as industrial or technology education teacher, supervisor or administrator in elementary, middle-junior high school, senior high school, post-high school, college or university, industry or other selected areas.

MANAGEMENT TECHNOLOGY

Dr. Zenon Smolarek, Program Director, 105 Technology Wing-Jarvis Hall, 715/232-1144

Introduction

Master of Science Degree This program provides educational experiences that prepare graduates for management and staff positions in business and industry. The students select an operational specialty area depending on their professional goals, educational background and available faculty expertise. Operational specialties such as industrial/operations management, quality management, manufacturing management, facilities management, communication system management, construction management, graphic arts management, packaging and industrial training may be developed. Learning experiences in the immediate professional setting include advanced technical problems and the field project.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college, have an overall grade point average of at least 2.75 and have the equivalent of two years of appropriate work or military experience.

Prerequisite courses may be prescribed upon evaluation of undergraduate transcripts if the student does not have a strong background in production management, marketing, accounting, engineering/economy, statistics, computer programming, personnel management, and in at least four technical areas.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; diagnostic (150-720); degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better, a minimum of 15 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Professional Foundations

12 credits

150-700	Systems Analysis and Design	3
150-710	Seminar in Industrial Operation	2
150-720	Foundations in Industrial Operations*	2
150-740	Introduction to Decision Theory	3
160-760	Corporate Planning	2

Leadership

Minimum of 5 credits

150-600	Organizational Leadership	3
150-660	Industrial Management	2
150-750	Organizational Development	3
160-679	Marketing Research	3
160-690	Administrative and Business Policies	3
212-535	Seminar on Self-Growth	2
320-720	Labor and Industrial Relations	2
413-752	Group Dynamics	2
421-830	Educational Administrative Behavior	3
459-717	Occupational Analysis and Job Placement	3
479-570	Assertive Training Procedures	2
479-579	Public Relations	2
479-581	Industrial Psychology	2
479-679	Advanced Public Relations	2
479-760	Personality	2

Operational Specialty

Minimum of 8 credits

Students select an operational specialization area depending on their professional goals, educational background and available faculty expertise. The courses within the operational specialty area are selected with the advisement of the program director. Students have developed such operational specialties as industrial management, construction management, graphic arts, electronics, systems analysis and design, and industrial training. Specialties may be developed to meet changing business and industrial needs.

Culminating Integrative Experience

Minimum of 2 credits

150-780	Problems in Management Technology or	
150-790	Field Project**	2-4

*A faculty tutor is assigned to guide students' self-development program. Strengths and deficiencies are identified and the student culminates the experience with both written and oral matriculation to candidacy examinations.

**Required of students who do not have a minimum of two year's experience in the area of their operational specialty. May be selected by students who do have a minimum of two year's experience in the area of their operational specialty.

MARRIAGE AND FAMILY THERAPY

Dr. Charles Barnard, Program Director, 222 Vocational Rehabilitation Building, 715/232-2404

Introduction

Master of Science Degree The offerings are designed to develop specific competence in the following areas of marriage and family therapy: therapy services, consultation, coordination, referral, psychometric assessment and evaluation, ethics and related issues, and research design and procedures. This program is designed to prepare people for work in settings such as mental health clinics, family life agencies, hospitals, industry, schools and/or private practice. The core of the program is experientially and practically orientated. This program is fully accredited by the American Association for Marriage and Family Therapy.

Learning experiences in the immediate professional setting include marriage and family therapy practicums.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.25, but less than 2.75. Applicants who have less than a 2.25 overall grade point average, but have relevant work experience since receiving the bachelor's degree and who are otherwise judged qualified as indicated below, may qualify for admission by taking a full credit load of selected graduate courses during the summer session or regular session and attaining a 3.0 grade point average.

It is recommended that the applicant have an undergraduate degree with major emphasis in one of the behavioral sciences or a closely related field. Applicants with deficiencies may be required to take additional undergraduate or graduate courses prior to attaining full status in the program. Students must complete the admissions process no later than March 15 of the year enrollment is planned. Both a Graduate College application form (*obtainable from the Graduate Office*) and program application forms (*obtainable from the office of the program director*) are required. Completion of the admission process means that all required admission documents must be in the Graduate Office and program admission documents must be in the program director's office prior to March 15.

When the number of students applying exceeds the number that can be accommodated, students will be admitted on the basis of academic performance and other factors appropriate for consideration including:

1. Work experience in a helping profession, i.e., counseling, social work, psychology, agency work, clergy and education.
2. Letters of recommendation from employers and consumers of services provided by the applicant. (*Request these forms from the program director.*)
3. Ratings of the individual as determined by a screening committee and process evaluation.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; admissions interview; applicant's goals; practicum evaluation; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of the 60-credit curriculum or demonstrated competence in the 60-credit curriculum with completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Professional Foundations

7 credits

212-742	Human Development	2
413-723	Psychopathology	3
413-765	Counseling Theory	2

Research Component

6 credits

421-740	Research Foundations	4
500-735	Investigations in Marriage and Family Therapy	2

Basic Preparation

42 credits

212-653	Relationship Communication Training	2
212-715	Theories of Family Process	2
212-750	Systems of Marital and Family Therapy	3
212-751	Seminar in Marriage and Family Therapy	3
212-755	Professional Issues in Marriage and Family Therapy	3
212-760	Sex Therapy Seminar	2
212-764	Marriage and Family Therapy Prepracticum Seminar	1
212-793	Marriage and Family Therapy Practicum I	4
212-794	Marriage and Family Therapy Practicum II	4
303-610	The Anthropological Study of Family Systems	3
413-666	Alcoholism and Family Systems Intervention	2
413-744	Psychometric Aids to Marriage and Family Therapy	2
413-763	Marriage and Family Therapy Prepracticum Seminar	1
413-793	Marriage and Family Therapy Practicum	4
413-794	Marriage and Family Therapy Practicum	4
413-795	Marriage and Family Therapy Practicum	1-2
XXX-XXX	Any approved electives	5

RISK CONTROL

Dr. John Olson, Program Director, 205 Communications Center, 715/232-2604

Introduction

Master of Science Degree This program is designed to prepare students for management positions in the field of occupational/industrial safety, health and environmental risk control through advisement, course work and applied research. The structure of the program focuses on meeting the professional and personal needs of the student.

The purpose of the program is to provide a comprehensive course of study in risk control management. The program has three components. The first two, safety engineering and industrial hygiene/environmental affairs, are technical in nature and are integrated with the third component, management/applied research, to provide a broad based technical/managerial perspective. Additional emphases in safety engineering and industrial hygiene/environmental affairs are also available.

Students completing the program are able to identify environmental, health and safety exposures posing risk to organizations and people. They are able to assist in control development, implementation and performance measurement, using group leadership techniques to ensure regulatory compliance and contribution to operational productivity through loss prevention/reduction.

Instructional efforts are directed to experiences that will provide students the capability to work effectively in their professional setting and to conduct applied research in various areas of risk control.

Applied learning experiences in the immediate professional setting include field problems and internships in risk control.

Admission

To be admitted to this program with full status, the applicant must hold a bachelor's degree from an accredited college with an overall grade point average of at least 3.0. In addition, the applicant must have appropriate academic preparation in a scientific, technical and/or related area. Professional, industrial/trade or educational experience is recommended prior to enrollment in the program.

A deficiency in these admission requirements does not preclude admission. It may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn the degree. An individual program of study will be designed by the program director to accommodate the requirements of the profession and the needs of the student.

Final student selection and admission to the program will be accomplished by the program director and the faculty of the Risk Control Center. Priority admission for the Fall semester will be done continuously through May. Late applications may be considered after this date. Priority admission for the Spring semester will be done continuously through November. Late applications may be considered after this date.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; applicant's goals; admissions interview; related work experience; program plan/degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include (a) completion of at least 38 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of half of the credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as outlined here:

Management/Applied Research

17-18 credits

140-781	Risk Management in Loss Control	3
140-782	Risk Control Management	3
140-783	Field Problem in Risk Control	3
140-785	Seminar in Risk Control	2

Select One:

140-575	Behavioral Approach to Accident Prevention	3
150-600	Organizational Leadership	3
150-750	Organizational Development	3

Select One:

150-700	Systems Analysis and Design	3
421-740	Research Foundations	4

Electives

140-784	Internship – Risk Control	2-4
150-5XX	Risk Management	3
150-520	Quality Assurance	3
150-525	Quality Management	3
198-560	Training Systems in Business and Industry	3

Safety Engineering

13 Credits

140-583	Voluntary OSHA Compliance	3
140-584	Safety Engineering Standards	2
140-586	Fire Protection	3
140-587	Human Factors Engineering/Ergonomics	3
140-589	Fleet Risk Control Management	2

Safety Engineering Emphasis Electives

140-5XX	Advanced Ergonomics	2
140-574	Alcohol, Drugs and Accident Prevention	3
140-588	Construction Safety	2
140-590	Product/Service Liability	2
150-530	Materials Handling	3

Industrial Hygiene/Environmental Affairs

8 Credits

312-542	Industrial Hygiene	3
312-652	Hazardous Waste Management	3
312-710	Industrial Hygiene Instrumentation	2

Industrial Hygiene/ Environmental Affairs Emphasis Electives

140-700	Semiconductor Risk Control	1
308-720	Occupational Toxicology/Radiation Biology	3
311-553	Environmental Chemistry	3
312-762	Industrial Hygiene Ventilation and Noise Control	3

SCHOOL PSYCHOLOGY

Dr. Calvin Stoudt, Program Director, 222 Vocational Rehabilitation Building, 715/232-1442

Introduction

Master of Science in Education The school psychology program at UW-Stout is a combined degree and certification program. The degree program occupies the first year of study on campus and leads to a master of science in education degree. The certification program follows the degree program and leads to school psychologist certification which is awarded, upon University recommendation, by the Wisconsin Department of Public Instruction or, if the applicant leaves Wisconsin, by the certifying agency of the state to which application is made. Admission to the degree and certification programs are separate processes, which include an admissions committee review of the admission material submitted by each applicant as described below.

Degree Program Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.25, but less than 2.75. These exceptions are subject to a strict limit of 10 percent of the students in the program and must be individually negotiated with the recommendation of the program director and the approval of the Graduate College.

Applicants should have an undergraduate degree with major emphasis in one of the behavioral sciences or a closely related field. As part of the preparation for entry to the master's degree program, a minimum of 15 credits in psychology and/or education courses in the following areas is required: developmental psychology, behavior disorders, personality, learning and/or statistics. The applicant with insufficient background may be required to take specific undergraduate courses in these areas in addition to those required within the graduate program.

Both the Graduate College Application form (*obtainable from the Graduate College*) and a Program Application form (*obtainable from the program director*) must be submitted by each applicant, including the documents identified on these two forms. Applicants must have presented and filed all required admissions documents and secured a personal interview with the faculty and program director by March 15 of the year enrollment is planned. After committee review, notification of acceptance will be made by April 15. If openings exist after this date, late applications will be accepted until June 15, with notification by July 15. When program openings occur, after the June 15 date, the program director and the committee will determine whether these applications may be acted upon for admission during the fall or winter term, or whether it may be necessary to hold admission until the next March 15 application deadline. In any event, the process for selecting applicants will be strictly followed in each and every case.

Students will be admitted on the basis of academic performance, admissibility to the Graduate College and rankings of a screening committee. These rankings are based on:

1. Work experience in a helping profession, i.e., counseling, education, social work, psychology and volunteer activities.
2. Letters of recommendation from employers, instructors and consumers of services provided by the applicant.
3. An autobiographical statement in which the applicant has outlined interest, intent and goals regarding the profession of school psychology.
4. An interview in person (*or by telephone when restrictions prohibit a personal interview*) with the school psychology program director and faculty.

Certification Program Admission

Admission to the degree program does not ensure admission to the certification program. Rather, admission to the certification program occurs after members of faculty have had opportunity to observe the student's progress and to evaluate performance.

Application occurs after the student has maintained at least a 3.0 grade point average, has attained a grade of "B" or better in 413-788 Counseling Process Laboratory, and is either currently maintaining grades of "B" or better or has completed, with grades of "B" or better, each of the following courses: 489-743 Advanced Individual Mental Testing; 489-768 Diagnosis and Remediation of Learning Disabilities; 489-778A Psychoeducational Disability Laboratory; and 413-790 Supervised Counseling Practicum.

All persons accepted to these programs must read and acknowledge acceptance of the M.S. Ed. in School Psychology Admission, Retention and Dismissal Policy, which is available upon request or will be supplied prior to initial registration.

Application materials may be obtained from the program director. The process requires successful completion of a comprehensive examination given during the first week of summer school. Upon the basis of this information, a screening committee will recommend either admission to the certification program or termination from the certification program.

Practicing professionals who already possess an appropriate master's degree may wish to seek school psychologist certification only. Such individuals must also apply for admission to the certification program and to the Graduate College. To be considered for admission to the certification program, such applicants must be admitted to the Graduate College; provide three letters of recommendation from past employers and consumers of services; enroll for one term (*summer session will suffice*) in courses recommended by the program director; complete all aforementioned courses with a minimum grade of "B"; make application to the screening committee; and successfully complete the required comprehensive examination.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, application for admission, degree candidacy, intent to graduate, certification of program completion, and the following program specific processes: applicant's goals; counseling process laboratory; and practicum evaluation.

Requirements

The program outlined here includes all requirements for provisional school psychologist and school psychologist certification. Completion of the degree will require the completion of a minimum of 30 credits and the inclusion of all courses marked with an asterisk. Credits earned toward the degree must meet a grade point average of 3.0 or better. A minimum of 15 credits must be in courses open only to graduate students—700 level. Students must be approved for degree candidacy at the appropriate time.

All courses listed here are required for provisional school psychologist certification. The minimum number of graduate credits required to be recommended for certification as a provisional school psychologist is 55; for school psychologist, 63 credits and completion of the third year university supervised internship.

Psychological Foundations

421-740	Research Foundations*	4
479-850	Psychology of Development	3
479-730	Advanced Psychology of Learning	2
489-753	Psychometric Theory and Application*	2
489-731	Problems in School Psychology* or	
489-770	Thesis in School Psychology or	
500-735	Investigations	2-6

Educational Foundations

421-536	Multiculturalism: Issues and Perspectives	2
421-576	Field Experience – Cross Cultural Experience	1
431-630	Mainstreaming Students With Exceptional Educational Needs	3
489-777	Law and Legal Issues: School Counselors and Psychologists	1

Core Professional Training

413-675	Counseling Theory*	2
413-705	Play Therapy	2
413-752	Group Dynamics	2
413-760	Theories and Techniques of Behavior Modification	2
413-788	Counseling Process Laboratory*	3
413-790	Supervised Counseling Practicum*	3
489-701	Seminar—School Psychological Services*	2
489-710	Psychoeducational Assessment of the Young Child*	2
489-743	Advanced Individual Mental Testing*	2
489-745	Assessment of Personality (<i>Projective Techniques</i>)	2
489-753B	Lab – School Psychology*	1
489-766	Educational Applications of Neuropsychology	2
489-768	Diagnosis and Remediation of Learning Disabilities *	2
489-775	Consultation*	2
489-778	Psychoeducational Disability*	3
489-778A	Psychoeducational Disability Lab*	1
489-781	Field Practicum in Psychoeducational Services I	3
489-782	Field Practicum in Psychoeducational Services II	3
489-784	Clinical Practicum in Psychoeducational Services I	2
489-785	Clinical Practicum in Psychoeducational Services II	2

A minimum of 63 credits and completion of the third year university supervised internship (489-792) required for certification as a school psychologist.

*Required for degree

Degree Without Certification

Students who do not intend to work in the schools as school psychologists but who are interested in the mental health field where a preparation emphasizing disabilities, assessment, diagnosis and counseling would be desirable, may elect to complete the degree only. This may be completed in one calendar year. Students choosing this option must take the required degree courses as indicated with asterisks in the previous section and electives to total a minimum of 30 credits.

TRAINING AND DEVELOPMENT

Julie Furst-Bowe, Program Director, 143 Communication Technologies Building, 715/232-1321

Introduction

Master of Science Degree This graduate program is intended for individuals employed in business and industry or the public sector who have a strong career interest in the field of training and development; area business people who wish to acquire credentials in the field of training and development; and individuals who have graduated with various undergraduate majors, including those who have completed a specialization in Training and Human Resource Development.

At the completion of this program, individuals will be able to manage and coordinate training and development programs; analyze training needs; design, deliver and evaluate training programs; and develop training competencies in managers and supervisory personnel.

This 30-credit program may be completed on either a full-time or part-time basis. The Training and Development Program is designed to be completed in one calendar year (*two semesters and a summer session*) of full-time attendance.

Admission

To be admitted with full status to this program, applicants must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.25 but less than 2.75.

Entrance Requirements:

1. A completed bachelor's degree in a technical or business field or a field related to training and development.
2. An introductory course in training and development (*e.g. 198-560 Training Systems in Business and Industry*) or equivalent work experience.
3. An introductory course in computer applications or equivalent computer experience.
4. Able to meet all requirements of the UW-Stout Graduate College.

A deficiency in these admission requirements may require completion of additional undergraduate courses, and/or an increase in the number of graduate credits required to earn the degree.

Primary Evaluation Processes

Processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following specific processes: program application, applicant's goals; related work experience; program plan; student advisement; degree candidacy; and intent to graduate.

Requirements

Requirements for the degree include: (a) completion of at least 30 semester hours of approved graduate credits with an overall grade point average of 3.0 or better; a minimum of 15 credits must be in 700-level courses open only to graduate students; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution as follows:

Required Research Preparation

7 credits

150-700	Systems Analysis and Design	3
198-750	Field Problem in Training and Development	4

Required Professional Core Courses

17 credits

199-534	Task Analysis	2
198-730	Training Design and Evaluation	3
198-610	Delivery Systems for Training	3
198-740	Management and Coordination of Training and Development	3
198-746	Seminar in Training and Development	1
150-600	Organizational Leadership	3
479-XXX	Psychology of the Adult Learner	2

Professional Selectives

6 credits

Choose courses related to training and development with the approval of the program director.

Degree Program Supervision

Before completing 15 credits, students will prepare a program plan in keeping with degree requirements and the student's special needs. At that time, the program director will suggest a supervisory committee consisting of three members of the graduate faculty which will act on the appropriateness of the student's program, approve the proposed field study and administer the oral comprehensive examination.

VOCATIONAL EDUCATION

Dr. Orville Nelson, Program Director, 218 Applied Arts Building, 715/232-1362

Introduction

Master of Science Degree The graduate program in vocational education is designed to increase the professional competence of those who plan to serve in a high school or post high school program as a teacher, coordinating teacher, coordinator, supervisor, local vocational education coordinator or administrator of vocational education. Learning experiences in the immediate professional setting include internship, outreach courses and independent study.

Admission

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75.

Applicants with undergraduate degrees and certification in the various subject areas of vocational-technical education are generally eligible.

Applicants with appropriate subject matter backgrounds, but who do not have the required professional education, will need to complete, for undergraduate credit, at least one appropriate methods course. This should be completed early in the program.

Applicants for the emphasis in Local Vocational Education Coordination (LVEC) must complete, for undergraduate credit, a course in the principles, issues and/or philosophy of vocational-technical education. (Request additional admission information from the program director for the LVEC emphasis.)

Prior to the awarding of the degree, the student must present evidence of the necessary amount and kind of occupational experience as specified by the appropriate state certifying agency.

A deficiency in these admission requirements does not preclude admission, but it may require completion of additional undergraduate work and/or increase the amount of graduate credit required to earn the degree.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: application; degree candidacy; and intent to graduate.

Requirements

The requirements for this degree include: (a) completion of at least 30 semester hours of graduate credit with an overall graduate grade point average of 3.0 or better; a minimum of 15 credits must be in courses open only to graduate students—700 level; (b) approval for degree candidacy at the appropriate time; and (c) a course distribution which is outlined here:

Preparation in Research

6-10 credits

190-739	Introduction to Research in Vocational/Technology Education	1
199-736	Problems in Vocational Education or	
199-770	Thesis—Vocational Education or	
199-784	Internship—Local Vocational Education Coordinator (for LVEC only)	2-8
421-740	Research Foundations	4

Concentrations

Teaching

20-24 credits

199-502	Principles of Vocational, Technical and Adult Education	2
479-730	Advanced Psychology of Learning	2
<i>Select one:</i>		
195-532	Futures of Technology	2
421-700	Philosophy of Modern Education	2
421-705	Social Thought of American Educators	2
Plus, appropriate courses in the teaching/learning process.		

Administration

20-24 credits

199-502	Principles of Vocational, Technical and Adult Education	2
479-730	Advanced Psychology of Learning	2
<i>Select one:</i>		
195-532	Futures of Technology	2
421-700	Philosophy of Modern Education	2
421-705	Social Thought of American Educators	2
Plus, appropriate courses in administration.		

Local Vocational Education Coordination

18-26 credits

This emphasis is the certification program for Local Vocational Education Coordinators in Wisconsin; similar positions exist in other states.

199-560	Cooperative Occupational Education Programs	2
199-710	Coordination and Supervision of Vocational Education or	
413-691	Theories of Career Development	2
421-702	Principles of Supervision	2-3
421-726	Administration	2-3
421-733	Survey Procedures	2
421-750	Curriculum Theory and Practice	2
479-579	Public Relations	2
489-753	Psychometric Theory and Application	2

Marketing Education

4 credits

196-701	Issues in Vocational Marketing Education	2
196-702	Improving Marketing Education Methods/Materials	2

Special Needs**20-24 credits**

199-502	Principles of Vocational, Technical and Adult Education	2
199-710	Coordination and Supervision of Vocational Education	2
431-630	Mainstreaming Students With Exceptional Educational Needs	3
431-700	Special Needs Learners in Vocational Education	2
431-725	Programing for Vocational Special Needs	2
431-790	Special Education Seminar	2
479-730	Advanced Psychology of Learning	2
<i>Select 5-9 other credits from the following:</i>		
195-733	Impacts of Technology	2
199-534	Task Analysis	2
199-560	Cooperative Occupational Education Programs	2
199-746	Seminar	1-3
199-780	Internship – Vocational Education	4-8
199-792	Administration – Vocational, Technical and Adult Education	2
421-536	Multiculturalism: Issues and Perspectives	2
431-516	Psychology of the Exceptional Child	2-3
431-518	Introduction to Teaching/Assessment in Special Education	2
431-526	Practicum in Special Education	2
431-595	Introduction to Gifted Education	2
431-662	Classroom Management Techniques	3
459-723	Procedures of Vocational Evaluation	3

Preparation for Further Development

The student should confer with the program adviser in choosing the elective credits to complete the 30-hour degree requirements. There is considerable flexibility in the program with regard to electives, and they may be taken as needed to fulfill the individual goals and objectives of the student. Generally, if appropriate to your goal, electives may be chosen from your technical field (see last paragraph) and from among the following courses:

120-560	Audiovisual Communications	2
120-740	Instructional Development	2
150-600	Organizational Leadership	3
195-733	Impacts of Technology	2
199-534	Task Analysis	2
199-560	Cooperative Occupational Education Programs	2
199-710	Coordination and Supervision of Vocational Education	2
199-746	Seminar	2
199-780	Internship – Vocational Education	4-8
199-792	Administration – Vocational, Technical and Adult Education	2
320-720	Labor and Industrial Relations	2
354-741	Computer Programming Techniques	2
387-540	Sociology of Work	3
413-501	Introduction to Guidance	2
421-641	Education Evaluation	2
421-702	Principles of Supervision	2-3
421-705	Social Thought of American Educators	2
421-714	Teaching Strategies	4
421-726	Administration	2-3
421-733	Survey Procedures	2
421-739	High School Curriculum	2
421-742	Program Evaluation	3
421-750	Curriculum Theory and Practice	2-3
479-579	Public Relations	2

Persons preparing to teach will select advanced courses in their subject field. This bulletin lists graduate level technical courses, which are available for graduate credit in certain individual situations. Students are urged to investigate advanced subject matter courses suitable to their particular teaching field; in some teaching areas, it may be desirable to transfer them from another institution. However, prior approval to take any course should be obtained.

VOCATIONAL REHABILITATION

Ms. Shirley Stewart, Program Director, 403 Education and Human Services Building, 715/232-2499

Introduction

Master of Science Degree The Vocational Rehabilitation program is guided by its mission to prepare rehabilitation professionals who will assist and support individuals with disabilities during the rehabilitation process. Emphasis is given to the vocational, social, adjustment and independent living phase of rehabilitation. The program is designed to prepare personnel to assist individuals with disabilities to make and implement their own life choices so as to lead more satisfying lives. It emphasizes understanding vocational issues in order to use them as strategies to empower individuals with disabilities.

It is within the mission to provide programming for individuals preparing to enter professional-level rehabilitation positions as well as personnel currently employed but who wish to upgrade and maintain their professional skills. Three concentrations are currently available which (a) form a rehabilitation foundation; (b) provide opportunities for career advancement and development of leadership potential; and (c) provide a specialization within rehabilitation. These concentrations include vocational evaluation, rehabilitation counseling and rehabilitation facility administration. At program completion, each student will (a) define the functional impacts of disabling conditions; (b) understand the process of coordinating community services to serve people who are disabled; (c) analyze jobs and career opportunities to assist in planning and/or developing rehabilitation services; (d) understand rehabilitation philosophy, trends and practices; and (e) apply research findings to improve services to people with disabilities. The goal of each concentration is to prepare rehabilitation professionals who have the knowledge, skills and experiences necessary to work effectively in the field. The concentration in rehabilitation counseling is recognized by the Council on Rehabilitation Education (CORE) at accreditation status.

The master of science degree program in vocational rehabilitation is a 48-credit program. A maximum of six credits can be waived by the program director due to completion of equivalent graduate or undergraduate work with a grade of "B" or better. Both part-time and full-time students are accommodated through course scheduling, although the vocational evaluation concentration does require a one-semester, on-campus practical experience. Students may elect to complete more than one concentration by completing the prescribed course work. At least one elective is available for each student to pursue a personal interest area that will complement the established program. Each concentration includes learning experiences in professional settings as part of the 27-credit concentration. Students have the option to focus on a particular rehabilitation setting (e.g., *independent living, community-based programs, state agencies, proprietary agencies*).

Admission

A program-specific application (*obtained from the program director*) is required in addition to the Application for Admission to the Graduate College. In order to assure completion of the review process, the Graduate College and the vocational rehabilitation program applications, including all supporting documents, must be received six weeks prior to the start of the term for which admission is requested.

Entrance into the program requires the unanimous vote of approval by the Vocational Rehabilitation Admissions Committee. Approval will be dependent upon:

1. demonstrated potential for successful academic achievement at the graduate level;
2. interest in working with people with disabilities;
3. personal and social characteristics necessary to work with people with disabilities, such as personal and social maturity and a combination of patience, empathy and understanding;
4. ability to work independently;
5. ability to carry out professional responsibilities.

The decision for admission or denial of admission by the Vocational Rehabilitation Program Admissions Committee will be based on the criteria above with information obtained from records of undergraduate and/or other graduate academic attainment, letters of reference from a minimum of three persons who are familiar with the applicant in work or educational settings, information provided on the program application form, and other data and information received by the committee. The committee may require an interview in any case where information submitted is insufficient for rendering a decision.

To be admitted with full status to this program, the applicant must hold a bachelor's degree from an accredited college and have an overall grade point average of at least 2.75. Applicants may be admitted on probationary status if their overall grade point average is at least 2.25 but less than 2.75.

Students from a variety of educational backgrounds are eligible for admission. Applicants with degrees such as vocational rehabilitation, psychology, sociology, business, industrial technology, vocational education, special education, occupational therapy, physical therapy, communication disorders, recreational therapy and social work can find appropriate applications within the program. Although a specific educational background is not required, the applicant's transcripts will be evaluated to determine if deficiency work at the undergraduate level, or additional graduate work, will be required to earn a degree. Deficiency requirements may differ among the various concentrations.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: program application; practicum evaluation; internship evaluation; degree candidacy; and intent to graduate.

Prior to the granting of degree candidacy, a preliminary oral examination is conducted by the Vocational Rehabilitation Program Retention Committee. The committee will evaluate (a) the acquisition of a knowledge base as identified in program and concentration objectives; (b) existence of interests, aptitudes and personality consistent with requirements for successful practice in rehabilitation; (c) demonstrated potential for successful practice in the field of rehabilitation; and (d) the meeting of all Graduate College requirements for degree candidacy. A copy of the committee procedures is available from the program director.

Requirements

The requirements for this degree include (a) completion of a minimum of 48 semester hours of graduate credit (a maximum of 6 credits may be waived, resulting in a 42-credit program); (b) an overall grade point average of 3.0 or better; (c) at least half of the credits must be in courses open only to graduate students—700 or 800 level; (d) a minimum grade of "B" or better in laboratory, practicum and internship courses; (e) approval for degree candidacy at the appropriate time; (f) completion of the professional core; and (g) a course distribution as outlined for the specific concentration.

Professional Core

21-25 credits

421-740	Research Foundations	4
459-701	Foundations of Rehabilitation	3
459-713	Aspects of Disability: Physical Disability	3
459-714	Aspects of Disability: Cognitive Disability	3
459-717	Occupational Analysis and Job Placement	3
459-755	Problems in Vocational Rehabilitation or	
459-770	Thesis in Vocational Rehabilitation	2-6
459-764	Case Coordination	3

Concentrations

Vocational Evaluation

27 credits

459-610	Psychological Testing – People With Exceptional Needs	3
459-670	Work Adjustment Services	3
459-680	Applications of Theories in Rehabilitation Counseling	3
459-707	Practicum in Vocational Evaluation	4
459-723	Procedures of Vocational Evaluation	3
459-724	Laboratory in Vocational Evaluation	3
459-783	Internship in Vocational Evaluation	6
XXX-XXX	Approved Electives	2

Rehabilitation Counseling

27 credits

413-788	Counseling Process Laboratory or	
459-708	Practicum in Rehabilitation Counseling	3
459-610	Psychological Testing – People With Exceptional Needs	3
459-680	Applications of Theories in Rehabilitation Counseling	3
459-723	Procedures of Vocational Evaluation	3
459-787	Internship in Rehabilitation Counseling	12
XXX-XXX	Approved Electives	3

Rehabilitation Facility Administration

27 credits

140-581	Occupational Safety/Loss Control or	
140-781	Principles of Safety and Loss Control or	
140-782	Safety Management	2-3
150-600	Organizational Leadership or	
479-582	Human Resource Management	3
459-602	Rehabilitation Program Operations	3
459-705	Practicum in Rehabilitation Facility Administration	3
459-780	Administration in Vocational Rehabilitation	2
459-785	Internship – Rehabilitation Facility Administration	6
479-579	Public Relations	2
XXX-XXX	Approved Electives	5-6

Other Requirements and Program Policies

1. Degree Without Concentration

Students applying to the master of science program in Vocational Rehabilitation without a specific concentration are required to submit their personal program objectives as part of the program application process. These will be used to determine if the program will be beneficial in helping students reach their objective and as an aid in developing the individual's program plan.

2. Program Policy for Waived Credits

A maximum of six credits can be waived by the program director due to completion of equivalent graduate or undergraduate work with a grade of "B" or better.

3. Program Policy for Electives

Elective course work must contribute to the objectives of the program and needs of its students.

4. Additional Admission Requirement for the Rehabilitation Facility Administration Concentration

A minimum of two years of paid work experience in rehabilitation services or in an administrative position is required of applicants to the Rehabilitation Facility Administration concentration.

5. Deficiency Course Work

Undergraduate deficiency course work is required for specific concentrations. The Rehabilitation Counseling student is required to have an introductory course in counseling theories. The Rehabilitation Facility Administration student is required to have course work in accounting, finance and marketing.

Preparation for Further Development

With the advice and approval of the program director, students will select courses compatible with their educational preparation, interests and objectives.

Education Specialist Degree Programs



GUIDANCE AND COUNSELING

Dr. Edwin Biggerstaff, Interim Program Director, 250C Vocational Rehabilitation Building, 715/232-2687

Introduction

The Education Specialist degree in guidance and counseling is an advanced degree requiring 36 semester credits beyond the master's degree.

The program is for people who have a master's degree in guidance and counseling or in one of the related helping professions. It is designed to enable the student to develop beyond the master's degree level those competencies required in the broad area of guidance, counseling, psychological services or related helping services.

Admission

Persons interested should contact the program director. Students seeking admission to the program should complete the following at least 30 days prior to the opening of the term in which they plan to begin their program and submit all materials directly to the Graduate College.

1. File an application for admission to the Ed.S. program.
2. Submit a current vita listing all pertinent biographical and educational data.
3. Present official transcripts of all college and university work completed certifying award of bachelor's and master's degrees. Master's degree work must be in guidance and counseling or an equivalent field with a cumulative grade point average of at least 3.25 on a 4.0 scale in all graduate work. Transcripts need not be submitted for work completed at UW-Stout.
4. Evidence of at least two years of successful professional experience or the equivalent is desirable and letters attesting to such experience or professional promise should be requested from two appropriate persons.

After committee review of the application data and upon recommendation for admission, the Graduate College will:

1. Assign program status and inform the student of it immediately.
 - a. Full status will be granted to those who meet all admission requirements.
 - b. Provisional status may be granted to those who do not fully qualify on some requirements. At the conclusion of the first term of enrollment, the status will be re-evaluated.
 - c. Admission will be denied students whose qualifications do not meet the requirements and if the admissions committee decides provisional status is not warranted. The appropriateness for this program of an applicant's goals will be considered in the decision to admit or not.
2. Assign an adviser to assist in developing a degree program and registering for the first term.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: applicant's goals; supervisory committee; application for degree candidacy; final oral examination; and intent to graduate.

Degree Program Supervision

For the first enrollment, the program director will aid the student in developing a class schedule in keeping with degree requirements. After completing a minimum of six credits, prior to enrolling for a second term, the Graduate College will appoint a Supervisory Committee which has been developed by the student and recommended by the program director. This committee will consist of a chairperson and two to four members of the graduate faculty.

This committee will help the student prepare a total program plan in keeping with the degree requirements and the student's special needs. It is desirable for this plan to be completed before enrollment for a second term. The committee will also approve and supervise the student's field study, administer a comprehensive examination and recommend the awarding of the degree.

Requirements for the Ed.S. Degree

Prior to the award of the Ed.S. degree, the following requirements must be met.

1. Completion of an approved degree program with an overall grade point average of at least 3.25.
2. Filing of an Intent to Graduate form at least seven weeks prior to the expected graduation date.
3. Completion of a comprehensive written and/or oral examination, at least three weeks prior to graduation.
4. Filing of an approved field study report and abstract at least one week prior to graduation.
5. Recommendation for the degree by the supervisory committee.

Curriculum

Content for the advanced degree program will be drawn from three bodies of knowledge: foundations, research and professional study. Selection of these three components is based on the assumption that the holder of an advanced degree should be a practicing professional, capable of solving problems through applied research techniques, and a scholar in his profession.

The three components are shown below with a listing of the required courses for the program. The 700-level numbered courses are open to all graduate students. The 800-level numbered courses are intended primarily for post-master's degree work.

Program Plan

To qualify for the Ed.S. degree, the student must earn not less than 36 semester credits beyond the master's degree which will be distributed as follows; selectives will be planned with the program adviser and supervisory committee to ensure the most appropriate program for each student.

Foundations

9-10 credits

387-710	Sociological Foundations for Guidance	3
XXX-XXX	Selectives	6-7

Research and Evaluation

3-6 credits

421-742	Program Evaluation	3
421-816	Instrumentation for Research	3

Professional

20-24 credits

413-800	Field Study	2-6
XXX-XXX	Selectives	14-18

INDUSTRIAL AND VOCATIONAL EDUCATION

Dr. Orville Nelson, Program Director, 218 Applied Arts Building, 715/232-1362

Introduction

This is a 36 semester credit program beyond the master's degree. Two concentrations are available leading to an education specialist degree in industrial and vocational education: (1) industry and technology; and (2) professional education.

The program is for those who have a master's degree in industrial arts, industrial education, technology education, vocational education or equivalent. (*Equivalency meaning agriculture, business education, distributive education, home economics education, and trade and industrial education.*) It is also for those who have a master's degree and are a certified employee of a vocational-technical institute or a community college.

Admission

Students seeking admission to the program should complete the following in at least 30 days prior to the opening of the term in which they plan to begin their program.

1. File an Application for Admission to the Ed.S. program.
2. Submit a current vita listing all pertinent biographical and educational data.
3. Present official transcripts of all college and university work completed certifying award of bachelor's and master's degrees in industrial education, industrial arts education, technology education, vocational education or an equivalent field with a cumulative grade point average of at least 3.25 on a four-point scale in all graduate work. Persons having master's degrees in other fields who are certified and employed in vocational-technical education are also eligible for admission. Transcripts need not be submitted for work completed at UW-Stout.
4. Provide evidence of at least two years of successful teaching experience and professional promise by requesting letters from at least two administrators or supervisors.

The Education Specialist Degree Program Committee, comprised of graduate faculty and an Ed. S. degree student, will review the candidate's credentials and make a recommendation relative to admission to the director of the Ed.S. degree program. The committee may recommend that certain standardized examinations be completed or that the candidate be interviewed by the committee. The director of the major will recommend admission with full or provisional status to the Graduate College.

After review of the application data, the Graduate College will:

1. Assign program status and inform the student of it immediately.
 - a. Full status will be granted to those who meet all admission requirements.
 - b. Provisional status may be granted to those who do not fully qualify on some requirements. At the conclusion of the first term of enrollment, the status will be re-evaluated.
 - c. Admission will be denied students whose qualifications do not meet the requirements and if the admissions committee decides provisional status is not warranted.
2. Assign an adviser to assist in developing a degree program and registering for the first term.

Primary Evaluation Processes

The primary processes used to evaluate program and academic progress include course grades, research evaluation, certification of program completion, and the following program specific processes: application for admission; degree candidacy; final oral examination; and intent to graduate.

Degree Program Supervision

For the first enrollment, the student's program adviser will aid in developing a class schedule in keeping with degree requirements. Prior to enrolling for a second term, the student will prepare a total program plan in keeping with degree requirements and the student's special needs.

At that time, the Graduate College will appoint a supervisory committee consisting of three members of the graduate faculty.

The committee will act on the appropriateness of the student's degree program, approve the proposed field study, administer the oral comprehensive examination and recommend the award of the degree.

Teaching Experience

This program is designed for people in education. It is felt that course work will be more significant for those who have some experience in teaching. Thus, no more than eight credits in the degree program may be completed prior to satisfying the requirement of two years of successful teaching experience.

Requirements for the Ed.S. Degree

Prior to the award of the Ed.S. degree, the following requirements will be met:

1. Completion of an approved degree program of 36 semester credits with an overall grade point average of at least 3.25.
2. Filing of an Intent to Graduate form at least seven weeks prior to the expected graduation date.
3. Completion of a comprehensive examination, written and oral, at least three weeks prior to graduation.
4. Filing of an approved field study report and abstract at least one week prior to graduation.
5. Recommendation for the degree by the supervisory committee.

Industry and Technology Concentration

This concentration is designed for the graduate student desiring a broad educational experience leading to a professional career as a teacher of technology education, and industrial and technical subjects in high schools, vocational schools, technical institutes, junior colleges and universities.

Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a scholar in the discipline (*industry and technology*), capable of solution of problems through applied research techniques (*researcher*), and a practicing educator.

Curriculum

The Ed.S. degree with a concentration in industry and technology consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education. The industry and technology component consists of courses basic to the science of industry and technology and a field study. This component is intended to be flexible in order to afford candidates an opportunity to broaden themselves if their prior work has been narrow, or to study in depth a particular conceptual area of industry and technology if their prior work has been broad in nature. In this component, the advanced graduate student will have the opportunity to take additional physics, chemistry, mathematics, sociology, psychology and course work to develop a level of competence in one or two conceptual areas in their substantive teaching field. The impacts of technology, a course required of all students in the program, permits the students to look at how their teaching area has had an effect on people and society. The culminating activity is a field study. The main purpose of the field study is to provide students with an opportunity to apply and synthesize the contents of their program. Education specialists are encouraged to select practical problems related to their professional appointment, or if not presently employed, to select a problem from their discipline.

The applied research component consists of course work in computer science, research design and procedures, and statistics. A holder of an advanced degree should have an intimate knowledge of research design, measurement and statistics, and a broad background in the problems associated with industrial and vocational education.

The professional education component consists of courses in the foundational areas of education and curriculum and instruction. There is a growing body of knowledge and research dealing with education and the instructional process. It is imperative that the education specialist be able to implement current innovative educational practices and thought into the curriculum and the teaching process.

The three components are shown here as they appear in the curriculum requirements for the degree.

Program Plan

To qualify for the Ed.S. degree with a concentration in industry and technology requires that the student earn not less than 36 semester credits beyond the master's degree which will be distributed as follows:

Industry and Technology

16-20 credits

190-890	Field Study in Industry and Technology	2-6
195-733	Impacts of Technology	2
XXX-XXX	Selectives	8-12

Applied Research

6-10 credits

354-741	Computer Programming Techniques	2
421-816	Instrumentation for Research	3
XXX-XXX	Selectives	1-5

Professional Education

6-10 credits

421-811	Structuring Knowledge	2
479-850	Psychology of Development	3
XXX-XXX	Selectives	1-5

Professional Education Concentration

This concentration has been designed for the individual who is committed to additional depth in preparation as a professional educator in the areas of curriculum and instruction, and the supervision of instruction. Content for the advanced degree program will be drawn from three bodies of knowledge: (a) industry and technology; (b) applied research; and (c) professional education. Selection of these three components is based on the assumption that the holder of an advanced degree should be a practicing educator, capable of solving problems through applied research techniques, and a scholar within a discipline.

Curriculum

The curriculum consists of three groups of courses and/or experiences as follows: industry and technology, applied research, and professional education (*curriculum and instruction, and the supervision of instruction*).

The industry and technology component consists of courses in the sciences basic to industry and technology (*math, computer science, sociology, psychology, communication and economics*), and the impacts of technology on society.

The applied research component consists of course work in management information systems, instrumentation for research, employment and training research, and planning. A holder of an advanced degree should have knowledge of research design, measurement and statistics, and an understanding of problems associated with industrial and vocational education.

The professional education component has two sub-components: curriculum and instruction, and the supervision of instruction. Curriculum and instruction involves the advanced graduate student in curriculum engineering, instructional systems, instructional strategies, structuring knowledge, principles of learning, guidance of learning activities, identification and determination of instructional content, and computer assisted instruction as related to technology, and industrial and vocational education. Supervision of instruction involves policy developments, cost analysis, cost effectiveness, program evaluation review techniques, accountability in education, decision making models, evaluation systems, improvement of instruction, financial aspects, coordination, leadership procedures, management information systems, and management techniques as related to industrial and vocational education. The culminating activity is a field study which is six semester credits of the total (16-20 credits) in this component. The field study provides the opportunity to put into practice some aspect of the program that will benefit both the student and the institutional setting where the student is employed or aspires to be employed.

Program Plan

To qualify for the Ed.S. degree with a concentration in professional education, the student must earn not less than 36 semester credits beyond the master's degree, which will be distributed as follows:

Industry and Technology

6-10 credits

195-733	Impacts of Technology	2
479-850	Psychology of Development	3
XXX-XXX	Selectives	1-5

Applied Research

6-10 credits

421-816	Instrumentation for Research	3
XXX-XXX	Selectives	3-7

Professional Education

16-20 credits

421-811	Structuring Knowledge	2
421-890	Field Study in Professional Education	2-6
XXX-XXX	Selectives	8-12

Selectives

The student should confer with the program adviser (*chair of supervisory committee*) in choosing selective credits to complete the 36-hour degree requirement. There is considerable flexibility in the program with regard to selectives, and they may be taken as needed to fulfill the individual goals and objectives of the student.

Course Descriptions



Interpreting Course Descriptions

School/Curricular Codes

UW-Stout uses a six-digit course numbering system. The first three digits designate the school offering the course and the curricular code.

School of Industry and Technology

100 Interdepartmental
120 Media Technology
130 Graphic Communications
140 Safety and Loss Control
150 Industrial Management
160 Business Administration
181 Manufacturing
182 Construction
183 Design, Research and Development
184 Electricity/Electronics
185 Power
186 Transportation/Energy
190 Industrial Teacher Education
195 Technology
196 Marketing Education
198 Training and Human Resource Development
199 Vocational Education

School of Home Economics

200 Interdepartmental
212 Human Development and Family Living
214 Apparel, Textiles and Design
229 Food and Nutrition
242 Home Economics Education
245 Hospitality and Tourism

School of Liberal Studies

300 Interdepartmental
303 Anthropology
304 Art and Design
308 Biology
311 Chemistry
312 Industrial Hygiene
320 Economics
326 English and Journalism
354 Applied Mathematics
372 Physics
375 Political Science
387 Sociology
391 Speech

School of Education and Human Services

413 Counseling
421 Education
431 Special Education
459 Vocational Rehabilitation
479 Psychology
489 School Psychology

Academic Affairs

500 Transdisciplinary

Course Level

The second three digits of the course number refer to the course level. The 500 series is junior/senior level but is also appropriate for graduate credit. The 600 series is senior and graduate level. The 700 and 800 series are graduate level only.

Credits

One credit hour usually represents one hour of class time per week plus two hours of out of class study.

150-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

Course Planning Codes

Codes following the descriptions help you as you plan your course schedules.

P = Prerequisites are required as described.

\$ = A special course fee applies.

R = Course is repeatable for credit.

F = Course is offered during fall semester.†

W = Course is offered during winter semester.†

S = Course is offered during summer session.†

† These codes serve only as a general guide and **do not guarantee** that a course will be offered during a particular semester. Uncoded courses follow no usual pattern.

The Registration and Records Office publishes the *Timetable* prior to fall and winter semesters, which lists the courses offered in a particular semester, and the *Summer Session Early Bulletin for On-Campus Students* which lists the courses offered in a particular summer session.

Interdepartmental— Industry and Technology

100-500 Introduction to Futures Study 2 Credits

Methods of future projection, orienting thought toward future alternatives, impact of future problems on major areas of human activity. **F**

100-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business/ industrial/other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ FWS**

100-590 Technical Service Schools .5-6 Credits

Some special-purpose technical courses offered by manufacturers are suitable for college credit. Guidelines: (1) student makes all arrangements with manufacturer offering course; (2) one credit is awarded for each full week (40 hours) of attendance; (3) student enrolls and pays fees at university prior to taking course; (4) approval of dean of School of Industry and Technology needed before enrolling for credit; (5) Graduate College approval required for students taking course for graduate credit. **S**

100-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ FWS**

100-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ FWS**

Media Technology

120-504 Elementary Photography 2 Credits

Fundamentals of photography: aesthetics, basic theory, camera operation, film selection, lighting, roll-film processing, contact printing, enlarging and print finishing. Student must provide own camera. **\$ FWS**

120-535 Film—History and Appreciation 3 Credits

Evolution of motion picture film as medium of mass communication and aesthetic expression; contributions of noted film producers. **F**

120-540 TV—Appreciation and Criticism 2 Credits

Analysis of major TV program types; positive and negative contributions of TV; commercials; children's programming; TV viewing diary; development of TV action plan. **W**

120-560 Audiovisual Communications 2 Credits

Methods of evaluating and using audiovisual materials effectively; experience in operating equipment; basic techniques of media preparation. **FWS**

120-561 Advanced Graphic Production 2 Credits

Advanced techniques for planning, designing and producing materials for instruction and graphic training. **P:** 120-560. **\$ FWS**

120-570 Computer-Assisted Interactive Video 3 Credits

Design, production and evaluation of interactive video applications. Analysis of various hardware and software systems.

P: Consent of instructor or curriculum course. **\$ S**

120-600 Workshop 1-3 Credits

Special topics in media technology providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

120-600A Workshop 1-3 Credits

Special topics in media technology providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

120-605 Advanced Photography 2 Credits

Advanced monochromatic photography: aesthetics, advanced theory, view-camera techniques, studio lighting, materials and equipment selection, sheet-film processing, specialized processes and techniques.

P: 120-504. **\$ FWS**

120-610 Delivery Systems For Training 3 Credits

Overview and selection criteria of instructor-led, computer-based, and distance learning systems for delivering content to trainees in the workplace. Includes the development of training materials in a variety of formats.

P: Computer literacy and consent of instructor. **FWS**

120-612 Nature Photography 2 Credits

Fundamentals of camera techniques composition, aesthetics, exposure and light in relationship to animals, plants, water, weather and landscapes. Special emphasis on proper photographic equipment and field techniques for nature photography. **P:** 120-504 or consent of instructor. Camera required. **FWS**

120-614 Slide Duplication and Copystand Techniques 1 Credit

Selection and use of equipment for copystand work and slide duplication, discussion of and practice with filters and multiple exposures.

P: 120-504 or consent of instructor. **S**

120-625 Broadcast TV Production Internship 1-4 Credits

Practical experience in all phases of broadcast color television program production. Student develops internship program with teleproduction center manager. One credit per 40 hours of work experience.

P: 120-630 and 120-632 or consent of instructor.

120-630 Audio/Film Production Fundamentals 3 Credits

A survey of audio and video production fundamentals applied to the process of instructional communication. **FS**

120-640 Telecommunication Systems and Teleconferencing 2 Credits

Interactive teleconferencing techniques. Applications, effective utilization and cost-effectiveness of information distribution systems, including telephone, television, teletext, videotext, viewdata, cable TV, slow-scan TV, and computers. Survey of transmission systems, including telephone lines, satellites, coaxial cable, microwave and fiber optics. **FWS**

120-645 Color Photography 2 Credits

Aesthetics, color theory, film selection, lighting, copy techniques, slide duplication, reversal and negative color film processing, and color printing.

P: 120-504. \$ FWS

120-654 Small Format Video Production 1 Credit

Selection of small format video systems to meet varied production needs. Planning and shooting video programs using BETA or VHS camcorders or 8mm equipment. Participants must provide their own personal or institutional video equipment. S

120-716 Media Selection and Evaluation 3 Credits

Methods and procedures for identifying and using resources for selecting media materials and equipment for various instructional/training environments.

120-718 Introduction to Problems in Media Technology 1 Credit

Selection criteria for problems in media technology and preparation of a detailed proposal to explore a particular problem. Take prior to or concurrently with 421-740. P: Consent of instructor. FS

120-722 Problems in Media Technology 2 Credits

Identification, selection and completion of a problem in audiovisual communications, culminating in a Plan B paper. P: 421-740. FWS

120-732 Planning Media Facilities 2 Credits

Planning physical facilities for media production and distribution centers, large group multimedia auditoria, small group instructional area, and mediated carrels. Consideration of technological and environmental factors. Emphasis on working relationships with architects. P: 120-560. \$

120-740 Instructional Development 2 Credits

Systems approach to instructional improvement. Identification and analysis of instructional needs; design of instructional alternatives; selection and development of instructional packages; and the evaluation and validation of the resulting products in terms of student learning. P: 120-560, 120-561 FWS

120-760 Managing Media Services 3 Credits

Application of management systems to business and educational media programs. Emphasis on decision-making, planning and implementation, communication, supervision, and evaluation strategies. FWS

120-765 Practicum: Instructional Development 1-3 Credits

Experience for the media technology student seeking employment in business and industry. P: 120-740 and consent of instructor. FWS

120-766 Practicum: Media In-service 1 Credit

Students will practice planning, developing, presenting, managing and evaluating a variety of in-service experiences in instructional media.

120-770 Thesis—Media Technology 2-6 Credits

Independent research under direction of investigation adviser. Selection of problem, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for 2, 4, or 6 semester hours of credit in various terms with a final total of 6. P: 421-740, approval of program director. FWS

120-780 Microcomputers in Media Centers 2 Credits

Applications of microcomputers in the public school library and media center—cataloging, circulation, inventory, booking, budget, security, policy development, software, selection and evaluation, in-service training.

P: Computer literate and consent of instructor. FWS

120-788 Media Technology Internship 1-8 Credits

Practical experience in the various operational aspects of a school, university or special media center. The student will develop his internship program in conjunction with his major adviser and the media center director.

P: Approval of major adviser. FWS

120-790 Seminar 1-3 Credits

Specific content is designed to upgrade the competencies and knowledge of the participants. Content for each offering will change to reflect the current state of the art in media technology.

Graphic Communications**130-500 Workshop 1-3 Credits**

Special topics in graphic communications, providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. R FWS

130-504 Communications and Information Systems 1-3 Credits

Overview of the communications industry. Use of systems to create, process, transmit, receive and evaluate information. P: 130-103. FWS

130-505 Office Automation Technology 3 Credits

Automation information concepts and technology used in office including both communication storage, and retrieval systems. Emphasis on cost effective selection and implementation problems.

P: 130-103 or consent of instructor. FWS

130-506 Introduction to Telephony 2 Credits

Principles of current technologies, systems, and trends in telephone communication systems design and applications. FWS.

130-507 Artificial Intelligence Applications in Business 2 Credits

Artificial intelligence applications in business and industry with emphasis on office information system characteristics and implementation.

P: 130-505. FW

130-509 Business Applications in Desktop Publishing 1-2 Credits

Office automation and information systems for generating business formats on a computer network. Computerized forms, summaries, and related graphics utilizing automated pagination software, and existing software systems print commands with laser printer characteristics. FWS

130-543 Graphic Arts Production Techniques 2 Credits

The study of techniques associated with the production of two-dimensional printed media, with emphasis on design, production and evaluation, also including client and printer relationships. P: 130-366. R FWS

130-545 Publications Production 2 Credits

Principles of designing, printing and distributing publications for business, education and industry. P: 130-140. \$ FWS

130-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

130-557 Color Separation 2 Credits

Color separation from reflected and transmission copy; filters and densitometry; direct and indirect photographic color separation methods.

P: 130-355 or consent of instructor. \$ W

130-561 Screen Printing .5-2 Credits

Screen printing technology—applications, components and techniques. Survey of various materials and equipment used in screen printing. Production of screen-printed products. P: 130-140 or 304-518 or consent of instructor. \$ FW

130-581 Advanced Voice and Data Systems 4 Credits

Digital communications theory as applied to voice applications and the design and management of a data communication network. P: 130-283. F

130-582 Network Systems Design 3 Credits

Analysis, design and implementation considerations of a telecommunications network. P: Must be enrolled in telecommunication concentration or consent of instructor. W

130-595 Seminar 1-2 Credits

(Title will reflect specific graphic and industrial communication content). Current and projected communication methods, concepts, technologies and innovations in graphic communications. R S

130-597 Field Experience 1 Credit R FWS**130-598 Field Experience 1-2 Credits FWS****130-649 Cooperative Education Experience 1-8 Credits**

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

130-681 Telecommunications Systems Administration 3 Credits

Issues and concerns required to manage telecommunications networks and contemporary problems. P: Must be enrolled in telecommunication concentration or consent of instructor. F

130-697 Field Experience 1 Credit R FWS**130-698 Field Experience 1-2 Credits FWS****130-749 Cooperative Education Experience 1-8 Credits**

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

130-797 Field Experience 1 Credit R FWS**130-798 Problems in Drafting/Product Design 2-6 Credits**

Substantive study and activity for specialists in the graphic communications field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in graphic communications. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. R FWS

Safety and Loss Control**140-549 Cooperative Education Experience 1-8 Credits**

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

140-574 Alcohol, Drugs and Accident Prevention 3 Credits

Impact of alcohol and drug use on accident prevention programs; current efforts to rehabilitate alcohol and drug abusers.

140-575 Behavioral Approach to Accident Prevention 3 Credits

Behavioral aspects of accident prevention from physiological, psychological, sociological and cultural perspectives; identifying, understanding and modifying attitudes and behavior.

140-581 Occupational Safety/Loss Control 2-3 Credits

Overview of occupational accident prevention programs: techniques of measurement, cost of accidents, locating and identifying accident sources, and problems of selecting corrective action. P: Junior standing. FWS

140-583 Voluntary OSHA Compliance 2-3 Credits

Implications of federal Occupational Safety and Health Act of 1970 on industrial operations, systematic self-inspection and compliance procedures. FS

140-584 Safety Engineering Standards 2 Credits

Analysis of legal and voluntary industrial workplace standards and regulations. F

140-586 Fire Protection 3 Credits

Behavior of fire: chemistry, protection, prevention and control. W

140-587 Human Factors Engineering/Ergonomics 3 Credits

Physiological and psychological abilities in human/machine interface, working performance, reliability, comfort and safety; effective design of people and work environment as a cybernetic system. F

140-588 Construction Safety 2 Credits

Analysis of hazards, control procedures and systems related to typical construction equipment, tools and materials safety problems. FW

140-589 Fleet Risk Control Management 2 Credits

Controlling loss associated with motor fleet operations: selection, training and supervision of commercial drivers; regulatory controls. W

140-590 Product/Service Liability 2 Credits

An analysis of product liability losses, laws and controls. **W**

140-649 Cooperative Education Experience 2-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

140-700 Semiconductor Risk Control 1 Credit

Risk control (*safety, health, environmental*) aspects of the semiconductor industry. Hazard identification, reduction and control. **W**

140-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

140-781 Risk Management in Loss Control 3 Credits

An in-depth view of workers compensation, liability (*general products*) and property insurance, with respect to their respect on safety and health loss control. **F**

140-782 Risk Control Management 3 Credits

An in-depth study and application of current administrative, organizational, and supervisory practices, which are specifically and uniquely related to managing industrial or occupational loss prevention and reduction systems. **W**

140-783 Field Problem in Risk Control 3 Credits

An operational experience which requires identification of a technical and/or administrative problem in an occupational setting. The problem is researched, analyzed for alternative operational countermeasures, and field tested to determine the effectiveness of the solutions. **FWS**

140-784 Internship—Risk Control 2-4 Credits

Full-time, supervised work and learning experience in an appropriate professional setting. **FWS**

140-785 Seminar in Risk Control 2 Credits

Current topics, trends and methods in risk control are examined, discussed and evaluated. Extensive industrial facility visits are conducted and analyzed. **W**

Industrial Management**150-500 Engineering Economy 2-3 Credits**

Source and application of funds: cost control, valuation, depreciation, replacement theory and taxation. **P:** 150-200 or consent of instructor. **FWS**

150-501 Seminar 1-2 Credits

(Title will reflect specific business or management content.) Current topics in business and industrial management to meet specific needs of students enrolled. **FW**

150-501A Seminar 1-2 Credits

(Title will reflect specific business or management content.) Current topics in business and industrial management to meet specific needs of students enrolled. **FW**

150-502 Time Management 1 Credit

Elements of time management, strategies and techniques in industrial and business environments. Analysis of time use by all levels of management.

150-505 Product and Inventory Control 3 Credits

Principles and techniques of minimizing cost of ordering, receiving, storing, issuing, scheduling, routing, dispatching, expediting, and controlling material, parts, subassemblies, and final assemblies of a manufacturing system.

P: 150-200 or 354-130 or 354-530. **FW**

150-510 Production Processing 3 Credits

Production processes, especially product design as related to economic production; factors that influence choice and sequence of process to obtain end product. **P:** 150-200. **FW**

150-514 Industrial Enterprise Practicum 3 Credits

Organization and operation of an industrial company; election, designing, production planning, production, marketing and distribution of a product.

P: 150-150. **FWS**

150-520 Quality Assurance 3 Credits

Practical and statistical quality control in design and use of quality assurance programs: quality engineering, manufacturing quality assurance and product quality assurance. **P:** 150-200, 354-130 or 354-530. **FWS**

150-525 Quality Management 3 Credits

Provides the managerial and technical knowledge necessary to prepare, document, manage, and evaluate quality systems from beginning design through system operation and post-delivery customer services within a product or service environment. **P:** 150-220 and 150-520. **FWS**

150-530 Material Handling 3 Credits

Principles of material handling, handling function, its role in production activities and problems of handling materials in industrial settings.

P: 150-200. **FW**

150-540 Time and Motion Study 3 Credits

Methods engineering in business and industry: improving methods of performing and measuring work done by individuals or groups through motion analysis, charting techniques and principles of motion economy.

P: 150-200. **FWS**

150-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

150-550 Plant Layout 3 Credits

Principles and methods of solving plant layout and material handling problems.

P: 150-200. **FW**

150-597 Field Experience 1 Credit FWS

150-598 Field Experience 1-2 Credits

Off-campus work and study in an approved position to better understand business and industrial concepts and practices. **R FWS**

150-600 Organizational Leadership 3 Credits

Supervisor's role in attaining organizational objectives through human resources management; supervisory skills of communication, motivation, initiation of change, discipline, delegation and grievance handling developed on basis of organizational and individual behavior concepts.

P: Senior or graduate standing. **FWS**

150-601 Management Consulting 2 Credits

The organization and analysis of major elements of the consulting profession in management: 1) subject matter expertise, 2) marketing, 3) organizational development, 4) business principles for consultants, and 5) communication skills; synthesis of the interdependent relationship of the major elements in the consultation process. **FW**

150-605 Production and Inventory Control Practicum 2 Credits

Application of principles and techniques learned in 150-505 as part of professional semester/manufacturing laboratory. **P:** 150-505.

150-615 Women and Minorities in Management 2 Credits

An examination of current status of women and minorities in management positions such as managerial styles of women and minorities, coping skills for managerial women and minorities, specific leadership techniques, and changing and leading organizations to minimize discrimination.

P: 150-600 or 160-304 and 387-110. Significant experience or consent of instructor. **F**

150-620 Quality Assurance—Practicum 4 Credits

Application of principles and techniques learned in 150-520, as part of professional semester/manufacturing laboratory. **P:** 150-520.

150-630 Employee Involvement: Work Teams 2 Credits

Background and history of employee involvement, teams as a method of employee involvement, analysis of the advantages and disadvantages of different team structures and the planning processes used to implement team structures, analysis of situational variables used to help design the best team approach for an organization, the support systems needed to maintain teams, phases of team development, facilitation skills, and team problem-solving methods. **P:** Senior standing or graduate standing or consent of instructor. **S**

150-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

150-660 Industrial Management 2 Credits

Principles and methods of analyzing and solving industrial problems; application through case studies, management games and special problems.

P: Senior standing. **S**

150-680 Production Management Practicum 2 Credits

Application of principles and techniques of analyzing and solving production management problems learned in prior course work to manufacturing project in manufacturing laboratory. **P:** Consent of instructor. **FW**

150-700 Systems Analysis and Design 3 Credits

A survey of design approaches to industrial research. Application of appropriate research tools to analyze and design jobs, organization, operating systems and product/market studies. **P:** Graduate standing. **FW**

150-710 Seminar in Industrial Operation 2 Credits

Discussion of current theory and practice of operation of engineering, marketing, manufacturing, financial administration and industrial relations aspects of industry. These integrated systems will be analyzed based upon the management of objectives concept. **P:** Graduate standing. **FW**

150-720 Foundations in Industrial Operations 2 Credits

This course is designed to improve the student's competencies in all aspects of industrial technology. A major professor will be identified who will serve as a tutor in guiding the student's self-development program. There will be a culminating matriculation to candidacy examination to assure minimum proficiency standards. **P:** Graduate standing. **FWS**

150-730 Advanced Technical Problems — Industrial Management 2-6 Credits

Advanced study in industrial management, management control, product development or process and facility planning. Recent developments, advanced technical work, experimental work and technical reports. A specific problem area for study in this course must be identified by the student prior to registering for this course. **FWS**

150-740 Introduction to Decision Theory 3 Credits

Application of quantitative methodology to the solution of industrial problems. **P:** Graduate standing. **W**

150-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

150-750 Organizational Development 3 Credits

Change agent skills for middle managers and external consultants to facilitate organizational health. Assessment, diagnosis, intervention, team building and coaching of key organization personnel. Emphasis on practical methods for the development of various types of organizations.

P: 150-600 or consent of instructor. **S**

150-780 Problems in Management Technology 2-4 Credits

Identification, selection and completion of a problem in management technology culminating in a Plan B paper.

P: Consent of instructor and approval of major adviser. **FWS**

150-790 Field Project 3 Credits

A capstone experience to integrate and synthesize previous learnings within the context of an industrial environment. The total integrated systems approach will be applied to an industrial project. This may be either research in a simulated multifactor industrial situation or an internship assignment.

P: Consent of instructor. **FWS**

150-797 Field Experience 1 Credit FWS**Business Administration****160-520 Seminar 1-3 Credits**

Current topics in business. (Title will reflect specific business content). **R FWS**

160-535 Entrepreneurship: Small Business Planning 3 Credits

Concepts, strategies and applications involved in entrepreneurship. Profile of entrepreneurs and the risks and rewards, creating products and services for the market place, going into business—start-up, buy out, franchise—legal and financial aspects. Preparing a business plan required.

P: 160-206 or 160-200 and 160-330 or consent of instructor.

160-538 International Logistics 3 Credits

International logistics strategy: customer service, inventory, transportation, packaging, warehousing, storage, exporting, licensure, joint ventures, ownership documentation, terms of trading, organization, financial and management skills. **P: 160-438. W**

160-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

160-573 Legal Aspects of Construction 3 Credits

Analysis of contracts and documents used in building construction industry: rights of the parties. Labor relations: law and labor, legality of strikes, legality of picketing and boycott as economic pressure, unfair labor practices, employer and union, rights and responsibilities of supervisor and worker. **F**

160-585 International Marketing 3 Credits

Principles and policies of marketing goods and services in international markets. Concepts, strategies and policies of world trade and multinational firms. **P: 160-330.**

160-588 International Business Practicum 3 Credits

Assist an actual business in developing their international marketing plan. Students, under the supervision of a faculty member, determine a product's foreign marketability. **P: 160-585 and consent of instructor.**

160-598 Business Administration Field Experience 1-2 Credits

Off-campus work and study in an approved position to better understand the challenges of being an effective manager. **R FWS**

160-601 Legal Environment of Business 2 Credits

Changing relationship of government and industry: regulatory legislation, administrative agencies, national policies and social control. **FW**

160-638 Industrial Distribution Seminar 2 Credits

Culminating and synthesizing experiences in industrial distribution. Individual topics will vary from semester to semester reflecting the latest changes in the field. **P: 160-438. \$ F**

160-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

160-679 Marketing Research 3 Credits

Experimental and survey techniques to secure information for successful marketing; primary and secondary sources; data collection, compilation and analysis methods; effective communication of conclusions and recommendations to management. **P: 160-330 and a first-level statistics course. FW**

160-690 Administrative and Business Policies 3 Credits

Integrates previous business studies, develops ability to solve business problems through scientific approaches to decision-making. Students use business cases on policy formulation and administration: manufacturing, marketing, finance, accounting, personnel, and public relations functions.

P: 160-330 and 160-340 and 320-210 or 320-201 and senior standing. **FW**

160-697 Field Experience 1 Credit FWS**160-749 Cooperative Education Experience 1-8 Credits**

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

160-760 Corporate Planning 2 Credits

Introduction to corporate planning, strategy and policy. Orientation to generalized planning process and the outputs of planning system. A discussion of planning decision subsystem, strategic information subsystem, planning organizational subsystem and planning management subsystem.

P: Consent of instructor. **FW**

Manufacturing**181-504 Computer Aided Manufacturing 3 Credits**

Justification for and application of computer assistance in manufacturing process; machine process control, inventory and materials handling, robotics and automated assembly, product design and part grouping in relation to total manufacturing operation.

P: 181-101 or consent of instructor or equivalent programming course. **\$ FW**

181-505 Robotics 2 Credits

Capabilities of and justification for industrial robots; lab work with robots and simulators in processing, assembly and materials handling.

P: 181-504 and 354-141 or consent of instructor. **\$ FW**

181-508 Industrial Metrology 3 Credits

Measurement of heat, moisture, speed, fluid flow, material properties, and angular and linear dimensions for parts production and process control. Theory and application with major emphasis on dimensional metrology. Introduction to statistical process control and non-destructive testing.

P: 181-102, junior standing or consent of instructor. **FWS**

181-510 Manufacturing Systems 3 Credits

Dedicated, flexible and standard manufacturing systems. Selection and application of standard production components and tooling to produce and evaluate a given product. Emphasis on integrated inspection, part transfer, production and robot application. **P:** 181-504. **\$**

181-515 Metallurgy 3 Credits

Properties of crystalline solids, production of iron and steel, the carbon-iron equilibrium diagram, principles of heat treatment, properties of ferrous alloys. Production, properties, and theory of the most important non-ferrous metals and alloys. **P:** 311-115. **FW**

181-537 Numerical Control in Manufacturing 1-3 Credits

Investigation and justification of numerical control of machine tools; types of control units and systems, feedback systems, manuscript writing and manual programming, tape punching and machine set up, fixture design and tool setting; working knowledge of basic machining processes recommended.

P: 181-102 or 181-504. **FW**

181-540 Design and Simulation of Manufacturing Cells 3 Credits

Applied manufacturing system design and evaluation. Group technology approach. Computer assisted coding and classification. Development of part families. Efficient design of manufacturing cells. Evaluation of manufacturing system designs using simulation and other techniques. Basic statistics and computer programming abilities desirable. **P:** 181-504. **\$ FW**

181-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

181-565 Welding II 2 Credits

Advanced work in arc and oxy-acetylene welding techniques; vertical, horizontal, overhead positions; destructive and non-destructive testing; MIG and TIG welding processes; oxy-acetylene machine and air carbon arc cutting.

P: 181-365. **W**

181-580 Packaging Development 3 Credits

Applications of packaging functions: developing a product's complete packaging system, from final production of product to consumer. **P:** 181-480. **FW**

181-585 Packaging Seminar 2 Credits

Current packaging problems or developments (*subject based on students' interests and current issues*). **P:** Senior standing in packaging concentration. **FW**

181-595 Seminar 1-2 Credits

(Title will reflect specific manufacturing content.) Designed to upgrade effectiveness of teachers or secondary school manufacturing content.

181-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

181-698 Field Experience 1-2 Credits FWS**181-713 Wood Properties I —****Structure and Characteristics 3 Credits**

A study of the structure, characteristics and physical properties of wood and wood fiber as industrial materials. Testing of physical properties: static bending, impact, compression, shear, tension and hardness; moisture content, specific gravity; dimensional change and micro-macro photography. **FW**

181-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

181-798 Problems in Industry and Technology 2-6 Credits

Substantive study and activity for specialists in the industry and technology field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. **FWS**

Construction**182-538 Contract Requirements and Specifications 3 Credits**

Principles of contract requirements and construction specification organization. Development of basic skills of project manual preparation. Demonstration of role of specifications within the construction process and relationship to other construction contract documents. **P:** 326-320 or 326-515. **FW**

182-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

182-552 Environmental Systems — HVAC 3 Credits

Principles of heating, ventilating and air conditioning; analysis and selection of systems and equipment. **P:** 372-232 or 372-242 or 372-282. **W**

182-553 Environmental Systems — Plumbing and Electrical 3 Credits

Plumbing, electrical and illumination systems for light and heavy construction. **P:** 372-232 or 372-242 or 372-282. **W**

182-558 Structural Systems — Wood and Steel 3 Credits

Analysis, selection, and delineation of wood and steel structural components and systems in buildings. **P:** 372-321. **F**

182-559 Structural Systems—Concrete and Masonry 3 Credits

Analysis, selection, and delineation of concrete and masonry structural components and systems in buildings. **P:** 182-558. **FW**

182-570 Construction Estimating I 3 Credits

Estimating and analyzing material, labor, equipment, methods of construction, overhead and profit, and submitting these factors in the form of a bid.

P: Junior standing. **FW**

182-571 Construction Estimating II 2 Credits

Computer-based estimating systems for construction. Take-off, pricing, bid preparation, resource and cost studies, and database operations.

P: 182-570. **FW**

182-572 Management of Construction 3 Credits

Organizing, managing and operating the contracting firm. **P:** 160-304. **FW**

182-575 Construction Practicum 2-4 Credits

Technical information, construction problems and actual development of light residential structure. **S**

182-595 Seminar 1-2 Credits

(Title will reflect specific construction content). Current and projected methods, concepts, technologies and innovations in construction. **R S**

182-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

182-670 Project Scheduling and Cost Control 3 Credits

Total concept of construction industry: contracting, financing, bidding, planning, organizing, coordinating, and controlling functions and techniques.

P: 182-570. **FW**

182-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

182-798 Problems in Industry and Technology 2-6 Credits

Substantive study and activity for specialists in the graphic arts field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in graphic arts. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. **R FWS**

Design, Research and Development**183-520 Prototype Development and Model Making 3 Credits**

Introduction to model making and prototype development/construction. Competencies are developed in converting design, research and development and other creative ideas into three-dimensional objects using traditional and non-traditional machining and forming techniques. Three-dimensional design problems form the core of this course. **P:** 181-102. **W**

183-532 Mechanical Design 4 Credits

Analysis and design of machine elements: gearing bearings, shafting and friction devices. **P:** 183-291 or 372-325, 183-592 or 372-533, 183-593. **W**

183-537 Mechanical Design Drafting 2 Credits

Design of a machine, specifications, layout, calculations, bills of material, detail and assembly drawings. **P:** 183-311, 183-532 or concurrent registration. **F**

183-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

183-592 Mechanics of Machinery I 3 Credits

Dynamics of machinery: rectilinear and curvilinear motion; translation and rotation of a rigid body, force-acceleration equation, impulse and momentum; work, power and energy; balancing and vibration.

P: 183-290 or 372-531, 355-153. **W**

183-593 Mechanics of Machinery II 3 Credits

Graphical analysis and synthesis of linkages, cams, gear trains, displacement, velocity, acceleration and dynamic forces. **P:** 183-290 or 372-531. **F**

183-595 Seminar 1-2 Credits

(Title will reflect specific design, research and development content). Current and projected communication methods, concepts, technologies and innovations in design, research and development. **R S**

183-620 Research and Development 2 Credits

Research and development procedures applied to specific industrial material and processing problems. **P:** Senior or graduate standing. **FW**

183-621 Research and Development Laboratory 1 Credit

This lab is taken in conjunction with 183-620 to allow students in technical majors to fulfill the requirements of the major research and design project.

P: Senior or graduate standing. To be taken concurrently with 183-620. **FW**

183-636 Computer Assisted Design Problems 2 Credits

Advanced CADD applications. Construct three-dimensional wireframe drawings. Perform finite element analysis on select components. Customize software for specific applications. In-depth analysis of CADD applications in mechanical and architectural design. **P:** Consent of instructor. **W**

183-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

183-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

183-798 Problems Drafting/Product Design 2-6 Credits

Substantive study and activity for specialists in the design, research and development field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in design, research and development. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. R FWS

Electricity/Electronics**184-542 Computer Applications in Electronics 3 Credits**

Microprocessor application at a system level. Use of hardware and software design aids such as assemblers, text editors, compilers, read only memory emulators, and system projects related to specific microprocessors. Introduction to the 16 bit microprocessors, 8 bit slice processors, signal processors and controllers. P: 184-575.

184-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

184-551 Introduction to Microprocessors 3 Credits

The examination of the working components of a simple microprocessor system, machine language programming, registers, memory, input-output and application such as security, energy monitor, control, communication, and transportation. P: 300-101 and basic electronic background or equivalent. FW

184-552 Electronic Communications 3 Credits

Electrical/electronic communication systems; modulation, demodulation, R.F. and I.F. amplifiers, alignment, antennas, composite TV signal, receivers, transmitters. P: 184-204. F

184-553 Instrumentation and Control 3 Credits

Industrial measurement, control, open loop, closed loop, analog, digital, electric/electronic, fluidic, mechanical, pneumatic. P: 184-371. W

184-555 Electronic System Applications 3 Credits

Electrical control, interfacing, signal conversion, sensor operation, feedback and electrical power devices as they are used in common applications of manufacturing, construction, transportation and communication systems.

P: 184-204.

184-574 Microprocessor Fundamentals 3 Credits

Overview of present day microprocessor technology. Function, analysis and operation of selected microprocessors. Memory, input-output interfacing devices. Basic machine/assembly and structured language programming and hardware application. P: 184-371.

184-575 Microprocessor Interfacing 3 Credits

Interfacing principles of microprocessor-based microcomputer systems. Input-output techniques, input-output mapping, asynchronous-synchronous communication, parallel-serial conversion. Microprocessor application such as control systems, energy monitor, cooking and communications. P: 184-574.

184-583 Fundamentals of Control 4 Credits

Analysis of elementary control systems via classical and Laplace transform techniques, frequency response and root locus plots, block diagrams and transfer functions, open and closed loop systems, stability considerations, digital to analog conversion, microprocessor-based control systems.

P: 184-280, 184-574. \$

184-586 Instrumentation 3 Credits

Descriptive and analysis of thermal, mechanical, acoustic, optical, pneumatic and electromagnetic sensors, measuring systems, calibration, performance of measuring systems, analog and digital signal conditioning. Measurement of frequency and time, and analysis and performance of display units.

P: 184-583. \$

184-595 Seminar 1-2 Credits

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics. R FWS

184-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

184-689 Development Practicum 4 Credits

Project research and design, specification control drawing documentation. Project construction and a technical paper presentation. P: Advanced standing.

184-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

184-798 Problems in Electricity/Electronics 2-6 Credits

Substantive study and activity for specialists in the energy electricity/electronics field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in electricity/electronics technology. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 concurrent registration. Consent of department chair. FWS

182-559 Structural Systems—Concrete and Masonry 3 Credits

Analysis, selection, and delineation of concrete and masonry structural components and systems in buildings. **P:** 182-558. **FW**

182-570 Construction Estimating I 3 Credits

Estimating and analyzing material, labor, equipment, methods of construction, overhead and profit, and submitting these factors in the form of a bid.

P: Junior standing. **FW**

182-571 Construction Estimating II 2 Credits

Computer-based estimating systems for construction. Take-off, pricing, bid preparation, resource and cost studies, and database operations.

P: 182-570. **FW**

182-572 Management of Construction 3 Credits

Organizing, managing and operating the contracting firm. **P:** 160-304. **FW**

182-575 Construction Practicum 2-4 Credits

Technical information, construction problems and actual development of light residential structure. **S**

182-595 Seminar 1-2 Credits

(Title will reflect specific construction content). Current and projected methods, concepts, technologies and innovations in construction. **R S**

182-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

182-670 Project Scheduling and Cost Control 3 Credits

Total concept of construction industry: contracting, financing, bidding, planning, organizing, coordinating, and controlling functions and techniques.

P: 182-570. **FW**

182-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

182-798 Problems in Industry and Technology 2-6 Credits

Substantive study and activity for specialists in the graphic arts field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in graphic arts. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. **R FWS**

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Introduction to model making and prototype development/construction. Competencies are developed in converting design, research and development and other creative ideas into three-dimensional objects using traditional and non-traditional machining and forming techniques. Three-dimensional design problems form the core of this course. **P:** 181-102. **W**

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P: Consent of instructor or department chair. **\$ R FWS**

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P: Consent of instructor or department chair. \$ R FWS

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P: Consent of instructor or department chair. \$ R FWS

183-798 Problems Drafting/Product Design 2-6 Credits

Substantive study and activity for specialists in the design, research and development field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in design, research and development. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 and consent of department chair. R FWS

Electricity/Electronics**184-542 Computer Applications in Electronics 3 Credits**

Microprocessor application at a system level. Use of hardware and software design aids such as assemblers, text editors, compilers, read only memory emulators, and system projects related to specific microprocessors. Introduction to the 16 bit microprocessors, 8 bit slice processors, signal processors and controllers. P: 184-575.

184-549 Cooperative Education Experience 1-8 Credits

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P: Consent of instructor or department chair. \$ R FWS

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The examination of the working components of a simple microprocessor system, machine language programming, registers, memory, input-output and application such as security, energy monitor, control, communication, and transportation. P: 300-101 and basic electronic background or equivalent. FW

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Electrical/electronic communication systems; modulation, demodulation, R.F. and I.F. amplifiers, alignment, antennas, composite TV signal, receivers, transmitters. P: 184-204. F

184-553 Instrumentation and Control 3 Credits

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Analysis of elementary control systems via classical and Laplace transform techniques, frequency response and root locus plots, block diagrams and transfer functions, open and closed loop systems, stability considerations, digital to analog conversion, microprocessor-based control systems.

P: 184-280, 184-574. \$

184-586 Instrumentation 3 Credits

Descriptive and analysis of thermal, mechanical, acoustic, optical, pneumatic and electromagnetic sensors, measuring systems, calibration, performance of measuring systems, analog and digital signal conditioning. Measurement of frequency and time, and analysis and performance of display units.

P: 184-583. \$

184-595 Seminar 1-2 Credits

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics. R FWS

184-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

184-689 Development Practicum 4 Credits

Project research and design, specification control drawing documentation. Project construction and a technical paper presentation. P: Advanced standing.

184-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

184-798 Problems in Electricity/Electronics 2-6 Credits

Substantive study and activity for specialists in the energy electricity/electronics field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in electricity/electronics technology. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 concurrent registration. Consent of department chair. FWS

Power

185-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

185-595 Seminar 1-2 Credits

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics. R FWS

185-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

185-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

185-798 Problems in Power 2-6 Credits

Substantive study and activity for specialists in the power field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in power technology. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 or concurrent registration. Consent of department chair. FWS

Transportation/Energy

186-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

186-557 Principles of Technology I 3 Credits

Contemporary applications of the principles governing force, work, rate, resistance, energy, power, and force transformers in mechanical, electrical, fluid and thermal systems. Technical content especially appropriate for educational applications. P: 372-231 or equivalent. FWS

186-595 Seminar 1-2 Credits

Specific content is designed to upgrade competencies of participants. Content will change to reflect current state of the art in electricity/electronics or power mechanics. R FWS

186-631 Private Pilot's Ground School 3 Credits

Preparation for F.A.A. private pilot's certificate: airplane utility, flight manuals, safety, federal aviation regulations, navigation, communication, weather, general aircraft operation and flight theory. FW

186-635 Introduction to Flight 2 Credits

Flying a single-engine aircraft: applied flight theory, dual-flight instruction and solo flight. P: 186-631.

186-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

186-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

186-798 Problems in Transportation/Energy 2-6 Credits

Substantive study and activity for specialists in the transportation/energy field to include library work, field observation, laboratory work planned by the student and approved and supervised by a faculty consultant in transportation/energy. Preparation of a technical report may be repeated for a maximum of six semester credits.

P: 190-739 or concurrent registration. Consent of department chair. FWS

Industrial Teacher Education

190-525 Technology for Elementary School Children 2 Credits

Development, philosophy, objectives and course organization for industrial arts for the elementary schools. Suitable laboratory work in woods, metals, plastics and drawing.

190-530 Implementing Technology Education 3 Credits

Converts the theory of contemporary technology education programs into instructional materials, facilities, and strategy suited to the secondary and post-secondary school. FWS

190-540 Middle School Technology Education 2 Credits

Reviews trends and activities in the technology education movement. To update instructors to teach middle school offerings. FWS

190-549 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. \$ R FWS

190-575 Workshop 1-3 Credits

Current specialized topics in industrial education through experiential activities. P: Consent of instructor.

190-598 Field Experience 1-2 Credits FWS

190-606 Activities in Technology/Vocational Education 2 Credits

A study and design of learning activities for industrial and vocational education. Learning activities will be developed on selected levels of the cognitive, psychomotor, and affective domains to carry out stated behavioral objectives. An evaluation of the appropriateness of learning activities as presented in contemporary curriculum projects.

190-631 Field Trips to Industry 1-3 Credits

Opportunities are provided for industrial and vocational education majors as well as teachers to accumulate information about industries through local and distant on-site visits to industries. A third credit may be earned by showing evidence of application of data collected in courses being taught. **\$ R**

190-637 Organization/Management of Technical Laboratories 2 Credits

Experience in administration, project development and teaching problems associated with industrial education. **P:** 190-205. **S**

190-638 Course Construction 2 Credits

Directed experience in curriculum development and course of study construction for industrial education teachers; development of behavioral objectives and of instructional materials to help reach these objectives; development of course of study, instructional package/unit of instruction. **WS**

190-649 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

190-704 History/Philosophy Technology Education 2 Credits

Evolution of modern industrial education through the people, movements, events and institutions that contributed to its formation. Developments and conditions in education and society also considered, plus their relationship to the theory and practices of industrial education throughout the years. **FS**

190-708 Issues in Technology Education 2 Credits

A seminar dealing with selected current issues in industrial arts. Developments of abilities to develop a position and defend it, to be critical without being offensive, and to be professional in an emotional atmosphere.

P: Consent of instructor or teaching experience. **WS**

190-735 Problems in Industrial/Technology Education 2 Credits

Identification, selection, and the completion of a problem in industrial education, culminating in a Plan B paper. **P:** 421-740 and 190-739. **FWS**

190-739 Introduction To Research in Vocational/Technology Education 1 Credit

Study of selection criteria for advanced technical problems in industry and technology, development of techniques appropriate to attacking these problems, identification of industries and organizations relating to these problems and preparation of a detailed proposal to explore a particular problem. Students should enroll for this during their first graduate enrollment and should plan to take the appropriate 1XX-54X, problems in industry and technology during their next enrollment. **FS**

190-746 Seminars in Technology Education 1-3 Credits

Identifying goals and outcomes for the local school; development of immediate and long-range curriculum plans; cooperating with local school administrative units in planning for improvement; use of the new Wisconsin curriculum guide for industrial education; initial preparation of individual courses of study for the local school program using behaviorally stated objectives.

P: Possession of a valid contract to teach and intent to teach in a particular local school unit, in which at least 75 percent of the local school industrial education teachers will also be participating in this seminar.

190-749 Cooperative Education Experience 1-8 Credits

Work and study in an approved position to gain business, industrial or other experience. Normally entails recurring, supervised work periods, each one building and expanding on the previous.

P: Consent of instructor or department chair. **\$ R FWS**

190-770 Thesis—Industrial/Technology Education 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six. **P:** 421-740 and approval of major adviser. **FWS**

190-775 Workshop 1-3 Credits

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

190-798 Field Experience 1-2 Credits FWS**190-890 Field Study in Industry and Technology 2-6 Credits**

A study which provides graduate students with the opportunity to: (1) explore in-depth the body of knowledge associated with their substantive teaching field in industry and technology, (2) provide an educational experience for implementing this knowledge into the classroom situation, and (3) devise methods to determine if this methodology has brought about desired behavioral changes.

Technology**195-520 Technological Advances—Fast Forward I 2 Credits**

Outlines industry's rapid advancements in high technology as utilized in the world today. Reference is made to a variety of applications of this technology now and in the future. **FS**

195-521 Technological Advances—Fast Forward II 2 Credits

Current applications of technology in today's society. Discusses how technological advances have affected educators through simulation, society through technological changes such as storing information, television communication and other new technological advances. **WS**

195-532 Futures of Technology 2 Credits

Concepts of future studies as applied to technology. Exploration of possible alternatives. Techniques and skills for the professional user and the citizen consumer. **F**

195-540 Future of Work 1-2 Credits

Future possibilities as to why people work, who will work, and in what conditions. Project probable work parameters from current trends. Relate past, present and future to students' individual work situations.

195-733 Impacts of Technology 2 Credits

A contemporary, historical and futuristic look at some of the economic, sociological, psychological and political implications of industry and technology. Students will identify and investigate several impacts of industry/technology to show depth of understanding and relationships between them. **FS**

Marketing Education**196-555 Marketing Education Seminar 2-3 Credits**

Designed to update marketing and distributive education undergraduates and graduates (*teacher-coordinators*) on work experience, new curriculum, student organization competencies, coordination techniques, special needs, and distributive education related projects. Will be used to in-service high school teacher-coordinators and vocational, technical and adult education marketing teachers.

196-701 Issues in Vocational Marketing Education 2 Credits

An in-depth study of contemporary issues confronting vocational distributive education. Possible solutions or alternatives will be proposed.

196-702 Improving Marketing Education Methods/Materials 2 Credits

Identification and analysis of instructional needs; design of instructional alternatives; selection and development of instructional packages; and the evaluation and validation of the resulting products in terms of student learning.

Training and Human Resource Development**198-549 Cooperative Education/Internship 1-8 Credits**

Work and study in an approved training department in business, industry or government. May be recurring, is supervised during work/study periods. Any recurring work/study periods would be designed to build upon previous experiences in the course.

P: Consent of instructor and completion of at least three training courses. **\$ R FWS**

198-560 Training Systems in Business and Industry 3 Credits

Types and purpose of training as related to business and industry. Training analysis, content, delivery systems, evaluation and justification for training. Designed for non-education majors. **S**

198-570 Training Methods in Business and Industry 2 Credits

Identification of training situations where the development and delivery of training is needed. Emphasis is on methods to deliver a training session. Students will be required to make training session presentations. **FWS**

198-575 Workshop 1-3 Credits

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

198-589 Training Internship 2-8 Credits

Opportunities for students to learn and practice training management and instructional techniques through activities and experiences in a training department. Objectives commensurate with student's background and field of training. Activities include designing and implementing training programs in student's major or minor field of study in either industry, business, military or government training programs.

P: 198-550 or 198-560, grade point average of 2.5, consent of specialization director. **FW**

198-600 Workshop 1-3 Credits

Special topics in training and human resource development providing hands-on or experiential learning activities. Specific content and title to reflect topic of the workshop. **R FWS**

198-730 Training Design and Evaluation 3 Credits

The systems approach to the design and evaluation of training modules in a business training context, including performance problem analysis, writing training objectives, conducting a training analysis, selection, design and evaluation of training methods, media and materials. Students design and evaluate a training module using principles taught in the course.

P: 198-560 and 199-534 or consent of instructor. **FWS**

198-740 Management and Coordination of Training and Development 3 Credits

Principles and processes necessary to effectively manage and coordinate the training function in business and industry. Topics include strategic planning, responsibilities and tasks of managing the training function, analyzing training problems, managing training projects, facilities planning, legal and ethical considerations in training, and trends in the training and development field. **FWS**

198-750 Field Problem in Training and Development 4 Credits

Identification of a training and development research problem in business and industry. Review of related research, selection of appropriate methodology, completion of research procedures, analysis of results and formulation of conclusions, recommendations and implications for practice. Final product is a written research report. **P:** 150-700. **FWS**

198-775 Workshop 1-3 Credits

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

Vocational Education**199-501 Preservice Workshop For Vocational Educators 1 Credit**

Introduction to the basic concepts of teaching courses in Wisconsin vocational, technical and adult education.

199-502 Principles of Vocational, Technical and Adult Education 2 Credits

Philosophy, organization and administration of vocational, technical and adult education, nationwide, in Wisconsin and on the local level. **S FWS**

199-534 Task Analysis 2 Credits

Analysis techniques utilized in curriculum development. Emphasis on task analyses and related procedures. Includes occupational and needs analysis, competency identification, objective writing and information mapping. Integrates task analysis with a total system for developing and revising vocational curriculum or job training programs. **FS**

**199-537 Competency-Based Education—
Vocational/Industrial 2 Credits**

Competencies for vocational, technical and adult education programs and courses. Development of competency-based education performance indicators in all domains, a competency-based education management system, and basis for competency-based education evaluation. **FW**

199-546 Seminar 1-3 Credits

Current topics in vocational, technical and adult education with application for personnel in the field. **P:** Consent of instructor. **FWS**

199-546E Seminar 1-3 Credits

Current topics in vocational, technical and adult education with application for personnel in the field. **P:** Consent of instructor. **FWS**

199-559 Technology Impacts Occupational Programs 4 Credits

Presentation of latest technology in communications, manufacturing, construction, and/or transportation which involve concepts from math, science and computer science. **RS**

199-560 Cooperative Occupational Education Programs 2 Credits

Philosophy, organization, coordination and teaching techniques of cooperative education programs in the various vocational areas. Roles, responsibilities and duties of the cooperative teacher coordinator. **FWS**

199-575 Workshop 1-3 Credits

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

199-575A Workshop 1-3 Credits

Special topics providing hands-on or experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

**199-580 Computer Aided Instruction—
Vocational, Technical and Adult Education 2 Credits**

Applications of the computer in managing vocational, technical and adult education classrooms and laboratories. Utilization of computers in course preparation, evaluation and methods of teaching. Use of existing software and the evaluation of it. **P:** Consent of instructor or computer literacy course.

199-597 Field Experience 1 Credit FWS**199-598 Field Experience 1-2 Credits FWS****199-605 Methods of Teaching Vocational Education 2 Credits**

Competency-based and individualized approach to methods of teaching vocational education. **F**

199-638 Course Construction for Vocational Educators 2 Credits

Competency-based and individualized approach to principles of course construction for vocational educators. **F**

199-640 Instructional Evaluation in Vocational Education 2 Credits

Competency-based and individualized approach to instructional evaluation for vocational educators. **F**

199-674 Adult Education 2 Credits

Philosophy and history of adult education in the United States. Techniques for teaching adults: psychological factors, methods, adult interests and characteristics.

199-698 Field Experience 1-2 Credits FWS**199-708 Issues in Vocational, Technical and Adult Education 2 Credits**

An in-depth study of contemporary issues affecting vocational, technical and adult education. Possible solutions or alternatives will be proposed. **S**

**199-710 Coordination and Supervision
of Vocational Education 2 Credits**

Principles of coordination/supervision in vocational, technical and adult education. The coordinator/supervisory positions are their functional relationship to the vocational education system. **FWS**

199-736 Problems in Vocational Education 2 Credits

Identification, selection and completion of a problem in vocational education culminating in a Plan B paper. **P:** 421-740. **FWS**

199-746 Seminar 1-3 Credits

Special topics on current developments in the field. Each seminar devoted to a specific development to be indicated with subtitle and description.

199-770 Thesis—Vocational Education 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six. **P:** 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are completed. **FWS**

199-775 Workshop 1-3 Credits

Special topics providing hands-on experiential learning activities. Specific content and title to reflect the topic of the workshop. **R FWS**

199-780 Internship—Vocational Education 4-8 Credits

A planned, supervised experience for M.S. or Ed.S. candidates. To be completed at selected locations capable of providing appropriate experiences.

P: Approval of major adviser and department chair. **FW**

199-784 Internship—**Local Vocational Education Coordinator 4-8 Credits**

Supervised field practice in local vocational education coordination. To be completed at selected schools or CESA agencies capable of providing appropriate experiences. **P:** Approval of program director. **FW**

199-792 Administration—**Vocational, Technical and Adult Education 2 Credits**

Vocational, technical and adult school operation, legal status, policy making staff personnel, student personnel, programs, public relations, physical plant, business management. P: 199-710.

199-797 Field Experience 1 Credit FWS**199-798 Field Experience 1-2 Credits FWS****Interdepartmental — Home Economics****200-681A Problems in Home Economics 1-2 Credits**

Course will deal with special problems in depth as initiated by an instructor according to student needs and interests. This course should serve as a culminating educative experience for students in the various areas of home economics.

P: Consent of instructor.

200-700 Trends in Home Economics 2 Credits

Study of societal trends that will influence the professional areas of home economics in the United States. Emphasis will be on improving the understanding of societal needs, the relationship among home economics areas and the future of home economics services. WS

Human Development and Family Living**212-507 Parent Education/Involvement 2 Credits**

Parent groups: training of leaders, survey of literature. Practicum with parent groups. P: 212-264. FW

212-520 Theories of Early Childhood Education 2 Credits

Early childhood education: evolution, theories and principles of current programs, and development of individual philosophy. FW

212-524 Child Development II 3 Credits

Empirical study of physical, intellectual, social and emotional development of children. P: 212-124 and 212-264. FW

212-525 Divorced, Single Parent and Remarried Family 2 Credits

Trends and issues in divorce, single parenting and remarriage related to effects on adults, children and society. FWS

212-530 Adulthood and the Family 3 Credits

Study of adults in the family context during the early and middle years.

P: 212-124. W

212-531 Hospice Clinical Experience 1-2 Credits

Work with an area hospice organization under the supervision of the hospice consultant or patient care coordinator. P: 212-351 or consent of instructor. FWS

212-533 Language Arts in Early Childhood Education 2 Credits

Early childhood education language arts teaching methodologies, emphasizing the development of young children's skills in listening, writing and speaking. FW

212-535 Seminar on Self-Growth 2 Credits

Theories of the self; exploration of aspects of self-development and actualization. P: 212-350 or 212-524. FW

212-540 Family Caregiving to Dependent Elders 1 Credit

Unique challenges confronting adult children who provide care to aging parents. Government, agency, workplace and family policies and practices promoting and/or undermining family strengths and well-being. FWS

212-544 Primary Curriculum: Science, Math, Social Studies 4 Credits

Curriculum planning for the primary levels of instruction, with particular emphasis on patterns of instructional organization and the planning, implementing and evaluating of sound science, mathematics and social science curricula. P: 212-344 and senior standing or consent of instructor. FWS

**212-545 Exceptional Needs and Programming—
Early Childhood 2 Credits**

Program development and implementation for preschool mentally handicapped children. P: Consent of department chair. FW

212-553 Dual Career Families 1 Credit

The dual career marriage as a form of family life; benefits and problems encountered. FWS

212-585 Family-Based Employee Assistance Programs 3 Credits

Structures and functions of employee assistance programs with employees and their families being the primary unit of analysis and service.

P: Consent of instructor and junior standing. FWS

212-590 Family Research and Methodology 3 Credits

Analysis of family theory, research methodology and selected topics in family relations. P: 212-250 and 212-350. W

212-594 Infant-Toddler Programming 2 Credits

Practical and theoretical issues relating to the development of programming for infants and toddlers, including infant and toddler development, curriculum development, working with parents, and program evaluation.

P: 212-124 and 212-160 or consent of instructor. FWS

212-595 Special Topics in Human Development 1-2 Credits

Special topics in human development; repeatable for different topics.

P: Junior standing. R FWS

212-601 Child and Family Law 3 Credits

Legal issues affecting children and families.

P: 212-250, 212-350 and junior standing. W

212-605 Family Health Care: Issues and Dilemmas 2 Credits

A descriptive review of four health-care issues facing the American family with special emphasis on the impacts of advanced technology in health care.

P: Junior standing or consent of instructor. W

212-607 Parent Counseling 2 Credits

Approaches and techniques for working with parents; observation and experience in childrearing problems parents face. P: 212-124 and 212-264. W

212-610 Family Impact Seminar 3 Credits

Content, methods and process of assessing impact of public policy on children and families. **P:** 212-250, 212-350, 375-510 or consent of instructor. **W**

212-615 Family Stress, Coping and Adaptation 1 Credit

Impact of family development and stress on individual and family well-being. **P:** 212-250. **S**

212-624 Advanced Child Study 3 Credits

A study of principles and review of literature pertaining to children. **P:** 212-124 and 212-264.

212-626 Special Topics in the Study of Family Life 1-3 Credits

Family life programs and literature; individual study of problems of personal or professional interest. **P:** 212-350 or consent of instructor. **R FWS**

212-626A Special Topics in the Study of Family Life 1-3 Credits

Family life programs and literature; individual study of problems of personal or professional interest. **P:** 212-350. **R FWS**

212-626B Special Topics in the Study of Family Life 1-3 Credits

Family life programs and literature; individual study of problems of personal or professional interest. **P:** 212-350 or consent of instructor. **R FWS**

212-626C Special Topics in the Study of Family Life 1-3 Credits

Family life programs and literature; individual study of problems of personal or professional interest. **P:** 212-350 or consent of instructor. **R FWS**

212-637 Seminar in Child Development 2 Credits

Special problems and aspects in child development; preference given to students' interests. **P:** Consent of instructor. **FW**

212-638 Child Abuse and Neglect 2 Credits

Systemic nature, forms and indicators, and prevention of abuse and neglect. Factors contributing to, and intervention skills in, coping with the effects of abuse and neglect on children and families at risk.

P: 212-124, 212-250, 212-264 and junior standing. **F**

212-650 Introduction to Marriage and Family Therapy 3 Credits

Conceptual frameworks and approaches to marriage and family counseling. **P:** Consent of instructor. **F**

212-651 Marriage and Family Therapy Seminar 3 Credits

Application of basic counseling techniques in premarital, marital, family and couples-group counseling; supervised by professional marriage and family counselor. **P:** 212-650 or consent of instructor. **W**

212-653 Relationship Communication Training 2 Credits

Communication theories and skills applied to marital, family and other intimate relationships. Application of communication skills to personal relationships and professional work. (*Preferably, but not necessarily, have your premarital or marital partner with you*). **P:** Consent of instructor. **F**

212-654 The Workplace and the Family 2 Credits

Linkages between families and workplace; corresponding consequences for individual family well-being and the workplace.

P: 212-124 and 212-250 or consent of instructor. **W**

212-662 Early Childhood Education Program Models 1 Credit

Exploration and analysis of contemporary early childhood education program models and practices in various settings.

P: Senior standing. **FWS**

212-664 Special Topics in Early Childhood Curriculum 1-3 Credits

Philosophy and methodology of early childhood education: problems confronting teachers. **P:** 212-303. **R FS**

212-664A Special Topics in Early Childhood Curriculum 1-3 Credits

Philosophy and methodology of early childhood education: problems confronting teachers. **R FWS**

212-664B Special Topics in Early Childhood Curriculum 1-3 Credits

Philosophy and methodology of early childhood education: problems confronting teachers. **R FWS**

212-665 Administration—**Early Childhood Education Programs 3 Credits**

A study of program organization, program design, staffing, licensing, certification, equipment and facilities for operating early childhood education programs. Field trips required. **F**

212-666 Family Planning 1 Credit

Factors influencing family planning; knowledge and services for effective family planning practice. **P:** One undergraduate course in family relations.

212-685 Seminar—**The Culturally Distinct Child and Family 2 Credits**

Study of cultural, ethnic, racial and economic influences on the child and family in the United States. Emphasis on knowledge and skills to improve human relations in settings serving young children and families.

P: 212-350. **FW**

212-686 Experience: The Culturally Distinct Child and Family 1 Credit

Intensive experience working directly with racial, cultural or economic groups whose background the student does not share.

P: Prior or current enrollment in 212-685. **FW**

212-690 Death Education and Counseling in Families 2 Credits

Death and dying theory; research, practice and application in education and individual and family counseling. **P:** 212-351 or consent of instructor.

212-693 Practicum in Child Development and Family Life 4-8 Credits

Practicum experiences in child development, family relationships and human resource management within a community agency, business or organization.

P: Consent of instructor. **R FWS**

212-703 Seminar in Child Development 2 Credits

Advanced seminar in study of all aspects of child development.

212-704 Child/Family Services 2 Credits

Social change, government initiatives, and recent research related to quality programs for early care and education of young children. **FWS**

212-707 Issues and Problems in Parent Education 2 Credits

A study of the issues and problems of parent groups and the training of parent-group leaders. **P:** 212-407 or consent of instructor.

212-715 Theories of Family Processes 2 Credits

Advanced analysis of family interaction theory. Emphasis is on normal family processes as they apply to the practice of marital and family intervention.

P: 212-590 or consent of instructor. **FWS**

212-742 Human Development 2 Credits

Human development theory, research, changing trends, problems and interpretations will be explored. Emphasis on application of scientific knowledge to practical relationships with children in the family, school, and community, and implications of child development concepts towards understanding of self and others.

212-750 Systems of Marital and Family Therapy 3 Credits

Survey of conceptual frameworks and approaches to marital and family therapy from a systems point of view. **P:** 212-650 or consent of instructor. **F**

212-751 Seminar in Marriage and Family Therapy 3 Credits

Advanced and in-depth study of the issues, skills and methods in premarital intervention and marriage and family therapy.

P: 212-750 or consent of instructor. **W**

212-755 Professional Issues in Marriage and Family Therapy 3 Credits

Exploration of the issues in the development of professional skills, attitudes and identity in the area of marriage and family therapy.

P: 212-750, 212-751 or consent of instructor.

212-760 Sex Therapy Seminar 2 Credits

This course is offered to graduate students, who have already taken a basic course in human sexuality and who plan to work in the helping professions. Its main goal is to provide participants with the basic skills, knowledge and attitudes that will enable them to help clients solve problems related to sexuality. **P:** 212-660 or course deemed equivalent by instructor. **W**

212-764 Marriage and Family Therapy Prepracticum Seminar 1 Credit

Preparation for delivery of clinical services to couples and families and clinical management will be addressed. Students will also establish orientation to the clinical practice of marital and family therapy in a state-certified outpatient mental health, alcohol and other drug abuse clinic.

P: Admission to the Marriage and Family Therapy program. **W**

212-766 Problems in Early Childhood Education 3 Credits

Overview of issues in early childhood education with emphasis on problems confronting teachers in establishing early childhood programs in communities and schools.

212-793 Marriage and Family Therapy Practicum I 4 Credits

Preparation for professional marriage and family counseling services through seminar discussions, observation, and supervised counseling experience.

P: Personal screening and approval by instructor or admission without deficiency to the proposed program in Marriage and Family Therapy; concurrent registration in 413-793; commitment to second semester sequel-enrollment in 413-794 and 212-794. **F**

212-794 Marriage and Family Therapy Practicum II 4 Credits

Sequel to 212-793. Continuing preparation for professional marriage and family counseling services through seminar discussions, observation, and supervised counseling.

P: Successful completion of 212-793 and 413-793; concurrent registration in 413-794.

Apparel, Textiles and Design**214-519 International Economic Trends in Textiles and Clothing 3 Credits**

Economic importance of the textile and apparel industries in the United States and the world. **P:** 214-140 and 320-210. **FW**

214-525 Men's and Boys' Merchandising 1 Credit

Specialized techniques of merchandising men's wear and boys' wear: stock planning, market trends and controls. **FW**

214-527 Store Management 3 Credits

Develop management skills for retail stores of varying size.

P: 214-430 or consent of instructor, senior or graduate standing. **FW**

214-533 Direct Mail Retail 3 Credits

Direct mail options available in retailing. Creation and development of appropriate vehicles. **P:** 160-370 and junior standing or consent of instructor. **FW**

214-535 Special Topics in Retail Merchandising and Management 1-3 Credits

Special topics in fashion merchandising. **P:** Junior standing. Completion of basic courses within the area or consent of instructor. **R FWS**

214-535A Special Topics in Retail Merchandising and Management 1-3 Credits

Special topics in fashion merchandising. **R FWS**

214-545 Textiles for Interiors 2 Credits

Raw materials, fabric structures, specifications, and legislation related to quality, performance, and maintenance of textiles for commercial and household uses. **F**

214-550 Textile Evaluation 3 Credits

Problems in fiber identification, fabric performance and care; chemical and microscopic testing procedures; methods for gathering and interpreting data; individual problems. **P:** 214-140. **FW**

214-555 Special Topics in Apparel Design/Manufacturing 1-3 Credits

Special topics in clothing and textiles. **P:** Junior standing. **R**

214-555A Special Topics in Apparel Design/Manufacturing 1-3 Credits

Special topics in clothing and textiles. P: Junior standing. R

214-568 Engineered Tailoring 3 Credits

Industrial production methods applied to construction of tailored garments.

P: 214-166. F

214-581 Functional Clothing Design 3 Credits

Application of physical science theory to problems in clothing design: impact protection and thermal balance of the human body, structural properties of materials, and apparel forms.

P: 214-368, 214-550. F

214-590 Practicum in Textile Design 3 Credits

Use of textile design techniques as means of artistic expression: stitchery, weaving, knotting, appliqué and hooking; emphasis on good design and creativity. P: 304-101 or consent of instructor. FW

214-594 Knit Design and Technology 3 Credits

Stitch formation and patterning of warp and filling knits. Influences on aesthetics and performance of knit fabrics. Design and production of knitted fabric and garments on a flat bed knitting machine, including use of CAD techniques. P: 214-140 and 214-285. \$ FWS

214-610 History of Costume—Ancient to European 3 Credits

Development of costume throughout the ages: fashion as it reflects past cultures and influences present day costume. F

214-611 History of Fashion—19th Century to Present 3 Credits

A study of the evolution of fashion from the 19th century to the present concentrating on the impact of the fashion designer and changing fashion trends. W

214-617 Social and Psychological Aspects of Clothing 3 Credits

Social and psychological influence of dress on individual and group behavior patterns. FW

214-619 National Study Tour to Fashion Industry 1 Credit

Five-day visit to New York or alternate city: study hours, discussions and lectures by leaders in American fashion market.

P: Consent of instructor and junior, senior or graduate standing. R W

214-625 Mass Merchandising 2 Credits

Comparative history, planning, design, and techniques of merchandising and operations. P: 214-227, 214-389. FW

214-626 Fashion Retailing Practicum 4 Credits

Observation and structured experience in merchandising procedures dealing with complete operations and management of retail establishment.

P: 214-329 and 214-430 or consent of instructor. FWS

214-630 Advanced Merchandise Planning Control 3 Credits

Application of merchandise theory and techniques to budget, manage, and adjust actual purchases, inventory, and sales of an actual retail business.

P: 214-430 with 3.0 grade point average or better. FW

214-631 Service Management Strategies 3 Credits

Analysis of modes of service. Planning strategies leading to quality implementation, utilizing extensive case studies. Also offered as 150-631. FW

214-671 International Textile Apparel Sourcing 3 Credits

Explore global market sources of apparel products for the vertical channel of fashion marketing. Analyze sourcing strategies and evaluate domestic/international sourcing options considering human resources, transportation, communication, production capabilities, cultural priorities, political influences, costs, quality and technology. P: 320-210. FW

214-674 Apparel Manufacturing: Computer Management Systems 3 Credits

Computer use in managing apparel designs, manufacturing and data interchange. P: 214-275, 214-280, 214-274. \$ FW

214-680 Draping 3 Credits

Application of draping principles in design and construction of garments; emphasis on creativity. FW

214-685 Apparel Design Studio 3 Credits

Creation, development, and formal presentation of original designs using flat pattern and/or draping techniques. Preparation of professional portfolio to include CAD and other illustrative materials representative of individual expertise. P: 214-285 and 214-581 and 214-680. \$ W

214-690 Advanced Fiber Design 1-3 Credits

Creative exploration of textile design: stitchery and appliqué. P: 214-590. W

214-693 Structural Design and Weaving 2 Credits

Experiences in loom weaving including two- and four-harness techniques.

P: 304-101 or consent of instructor. \$ FWS

214-694 Advanced Weaving Studio 2 Credits

Complex hand-weaving techniques: block theory, pile constructions, leno techniques and double cloth. Individual work encouraged.

P: 214-693 or equivalent. \$ FWS

214-695 Historic and Contemporary Fabrics 3 Credits

Analysis of designs and techniques of decorating historic and contemporary fabrics; contribution of decorative fabrics to enrichment of human experience. W

214-755 Topics in Clothing and Textiles 1-2 Credits

In-depth investigation of a specific area of clothing or textiles. A current topic that lends itself to a lecture discussion method of instruction will be selected for study. P: Consent of instructor.

**214-768 Problems in Textiles,
Clothing and Retail Marketing 2 Credits**

Identification, selection and completion of a problem in textiles, clothing, and retail marketing culminating in a Plan B paper. **P:** 421-740. **FWS**

214-769 Design Option Thesis 2-6 Credits

Independent research under direction of investigation adviser. Culminating in a design show. A descriptive paper written according to thesis standards, including slides, will be presented.

P: 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are earned. **FWS**

**214-770 Thesis—Textiles,
Clothing and Retail Marketing 2-6 Credits**

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards.

P: 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are earned. **FWS**

214-780 Advanced Draping 1 Credit

Manipulation of various fabrics on a dress form to develop garments from given and self-designed sketches that reflect advanced techniques. Construct garments from patterns. **P:** 214-680.

214-781 Advanced Flat Pattern 2 Credits

Draft and develop paper patterns for garments by varying a master pattern from given and self-designed sketches that reflect advanced techniques. Construct garments from pattern. **P:** 214-280, consent of instructor.

214-790 Seminar in Textiles, Clothing and Retail Marketing 2 Credits

Review, evaluation and interpretation of current research in textiles, clothing and retail marketing.

P: Consent of instructor or minimum of six credits in textile art area.

Food and Nutrition

229-505 Nutrition for the Aged 2 Credits

Nutrient requirements and food consumption patterns of the elderly; food services for aging Americans. **P:** 229-212 or consent of instructor. **W**

229-525 Special Topics in Food and Nutrition 1-2 Credits

Study of special topics in food and nutrition.

P: 229-212, consent of instructor and for 500 level, completion of basic courses in the area. **R F**

229-525A Special Topics in Food and Nutrition 1-2 Credits

Study of special topics in food and nutrition.

P: 229-212, consent of instructor and for 500 level, completion of basic courses in the area. **R F**

229-542 Advanced Foods 3 Credits

Comparative studies of food selection and preparation; appraisal of foods.

P: 229-124 or 229-240. **FW**

229-555 Sports Nutrition 3 Credits

Nutritional and metabolic requirements of physical activity. Metabolic fuel utilization during exercise and physiological adaptations to exercise training will be discussed. The health and well-being benefits of an optimal diet-exercise regime will be emphasized.

P: 229-410, 308-132, 311-511 or consent of instructor. **WS**

229-560 Nutrition Counseling: A Team Approach 3 Credits

Interdisciplinary team approach to individual and group client-centered nutrition counseling which includes assisting and advising clients on dietary information. Skills and techniques based on nutrition counseling theories that are most useful to registered dietitians in enhancing quality of life and planned nutrition intervention. **FWS**

229-606 Nutrition Education 3 Credits

Nutrition education as planned behavioral change: problems and solutions in instructing various populations; identification, development and evaluation of nutrition resources.

P: 229-212, 242-201, 229-308, 229-410 or consumer course if required in program, consent of instructor, and junior standing. **FW**

229-610 Food Policy Regulation and Law 3 Credits

Food and nutrition policy development and evolution. Key acts and agencies governing food regulation and law. Process of creating or changing law. Compliance and enforcement rules in inspection, labeling, export and import. Administrative practice in food law including proceedings and judicial review.

P: Junior standing. **F**

229-612 Clinical Experience – Community Nutrition Programs 1 Credit

Practical experience with community nutrition program; basic nutrition program or food service operation and nutrition education activity. Recommended: 229-618 and 229-630. **P:** 229-308, 229-410, 229-606, 229-380. **FW**

229-618 Diet Therapy 4 Credits

Principles and methods for use of diet as therapy in certain pathological conditions. **P:** 229-308, 229-410. **FW**

229-620 Food Styling 1-3 Credits

Food as media for artistic expression; effective use of color, form and texture.

P: 229-124 and senior or graduate standing or consent of instructor. **R FWS**

229-633 Maternal and Child Nutrition 3 Credits

Application of principles to maternal, infant, child and adolescent nutrition.

P: 229-212 and 308-132. **FW**

229-638 Experimental Foods 3 Credits

Experimentation with selected food materials, techniques and equipment; directed study in individually chosen area.

P: 229-124 or 229-240 and 311-201. **FW**

229-650 Food Processing 3 Credits

Industrial methods used to prepare and preserve food.

P: 229-124 or 229-240, 355-120. **W**

229-651 Food Engineering 3 Credits

Application of pertinent chemistry, physics and mathematics principles to food processing.

P: 311-201 and 372-211 and 355-153 and 355-154 and 229-650. F

229-661 Multicultural Aspects of Food and Nutrition Patterns 3 Credits

Food and nutrition patterns as influenced by social, religious, geographical, economic and political factors. Cultures emphasized include Native American, African American, Hispanic and Asian American. Food as a means of cross-cultural communication.

P: 229-124 or 229-240 and senior or graduate standing or consent of instructor. FW

229-697 Field Experience 2 Credits**229-701 Trends in Nutrition 1-2 Credits**

Practical application of recent developments in the field of nutrition.

P: 229-212. R

229-702 Minerals and Vitamins 3 Credits

Absorption and intermediary metabolism of minerals and vitamins.

229-705 Geriatric Nutrition 2 Credits

Theory and relationships of nutrition, longevity and aging. Food and nutrition legislation for the elderly—theory and implementation. Nutritional implications of acute and chronic disease states common among the elderly.

229-710 Clinical Nutrition 3 Credits

Innovative approaches in nutrition therapy. Clinical experience offered in area hospitals. P: 229-618 or equivalent.

229-712 Practicum in Community Nutrition Programs 1-2 Credits

Advanced experience in community nutrition programs. Individual project in nutrition counseling, identification, delivery and evaluation of nutrition and appropriate food services.

P: 229-606, 229-618, 229-680, 229-630, consent of instructor. R

229-720 Workshop in Foods 1 Credit

Individual and group investigations and solutions of problems in foods or food service. P: Graduate standing. R

229-721 Workshop in Nutrition 1 Credit

Individual and group investigations and solutions of problems in nutrition science and nutrition education.

P: Graduate standing. R

229-729 Proteins 3 Credits

Digestion, absorption and intermediary metabolism of protein. P: 229-410.

229-736 Carbohydrates and Lipids 3 Credits

Digestion, absorption and intermediary metabolism of carbohydrates and lipids. P: 229-410.

229-740 Food Preservation Technology 3 Credits

Application and evaluation of the technology of food preservation to selected areas in food science. P: 311-511 and 308-206.

229-742 Sensory Evaluation of Food 3 Credits

Selection, identification and measurement of food evaluation tools using consumer and laboratory sensory panels.

229-746 Food Innovations 2-3 Credits

Effects of food industry innovations on preparation and service of foods.

229-747 Problems in Food Science and Nutrition 2 Credits

Identification, selection and completion of a problem in food science and nutrition, culminating in a Plan B paper and oral presentation of the paper.

P: 421-740. FWS

229-756 Advanced Experimental Food 3-4 Credits

Principles of research methods applied to directed investigations in food preparation. P: 229-638. FW

229-765 AP4 Supervised Practice 3-9 Credits

Supervised practice experience in clinical, community and food service management. Structured experiences are provided at hospital, clinic, community and public school sites. Successful completion of 12 credits meets the American Dietetic Association requirement for an Approved Preprofessional Practice program (AP4). R FWS

229-770 Thesis—Food Science and Nutrition 1-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, preparation of the final paper according to thesis standards and oral presentation of the research. Student may enroll for variable semester hours of credit in various terms with a final total of six.

P: 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are earned. FWS

229-797 Field Experience 2 Credits**Home Economics Education****242-500 Externship—****Home Economics Community Education 4-8 Credits**

Practicum in one or more of the following home economics education programs: extension services, elementary education, post-secondary education, occupational teaching experience and community educational services. Approval of graduate program director required if taken for graduate credit.

P: Consent of department chair. FW

242-503 Home Economics in the Middle and Elementary School 3 Credits

Develop techniques, materials and curriculum concepts in home economics with application of human growth and development principles for teaching in middle and elementary school. W

242-544 Future Homemakers of America Workshop 1-2 Credits

Integration of Future Homemakers of America and the Home Economics Related Occupations student organizations into the home economics classrooms and programs. **P:** Junior standing.

242-597 Field Experience in Home Economics 2 Credits

Field experience related to home economics skills and knowledge used in teaching home economics wage earning courses at secondary level. **FWS**

242-620 Vocational Programs in Home Economics 2 Credits

Techniques, materials and curriculum for home economics wage-earning programs in secondary and post-secondary schools; preliminary procedures for program development. **P:** 199-502 and 242-301. **FW**

242-630 Concepts of Extension Education 2 Credits

Concepts and processes in conducting educational programs for adults and youth; philosophy, objectives and organization of extension education; leadership, development, program development, teaching methods and evaluation.

P: Senior or graduate standing in Home Economics or Home Economics Education. **W**

242-651 Family Life Education Programs 2 Credits

Development of family life education programs including methods, materials and techniques for teaching family relationships and child development at the secondary level. **P:** Senior standing and consent of instructor. **FW**

242-708 Curriculum Studies in Home Economics 2 Credits

Principles of curriculum construction. Review of recent literature on curriculum development. Evaluation of curriculum practice and techniques. **F**

242-710 Applied Evaluation in Home Economics 2 Credits

Theory and application of principles in planning evaluation techniques in home economics to assess behavioral changes in the cognitive, affective and psychomotor domains. **P:** Graduate standing. **W**

242-720 Special Topics in Home Economics Education 1-2 Credits

Consideration of problems in contemporary living that are affecting home economics education and their influence on the teaching of homemaking. **R S**

242-720A Special Topics in Home Economics Education 1-2 Credits

Consideration of problems in contemporary living that are affecting home economics education and their influence on the teaching of homemaking. **R FWS**

242-720B Special Topics in Home Economics Education 1-2 Credits

Consideration of problems in contemporary living that are affecting home economics education and their influence on the teaching of homemaking. **R FWS**

242-725 Graduate Internship in Home Economics 8 Credits

A clinical assignment in a school for one semester during which time the student integrates in-depth academic knowledge and pedagogical skill.

P: Completion of Home Economics/Family Life undergraduate concentration. Admitted to M.S. Home Economics program or approval of graduate program director. **FW**

242-744 Seminar in Home Economics Education 1-2 Credits

Issues in home economics education. **R FWS**

242-770 Thesis—Home Economics 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six.

P: 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are earned. **FWS**

242-775 Problems in Home Economics 2 Credits

Identification, selection and completion of a problem in home economics education, culminating in a Plan B paper. **P:** 421-740. **FWS**

Hospitality and Tourism**245-501 Food Service Administration 3 Credits**

Organization and administration of institutional food service systems, personnel selection and training, cost control and problems of supervision.

P: 229-318. **FW**

245-506 Club Management 3 Credits

Managing a membership, city, health and fitness, military, golf or other social or recreation club. **FW**

245-515 Lodging Administration 3 Credits

Analysis of theories, principles and techniques of management; problems and issues encountered by management in providing quality service within cost-efficient organization. **P:** 245-201 and 245-202. **FS**

245-521 Food Service Equipment 2 Credits

Factors affecting design, selection, physical facilities and utilities involved in food service equipment. **P:** 183-110. **FWS**

245-549 Cooperative Education/Internship 1-6 Credits

Work and study in an approved position to gain business and industry experience. Generally entails recurring, supervised work periods, each one building and expanding on the previous one.

P: 245-449 and consent of co-op mentor (*undergraduate credit*). Students must be enrolled in a graduate program and have consent of co-op mentor for graduate credit. **\$ R FWS**

245-550 Fast Food Operations 3 Credits

Organization and function of fast food service operations. Work methods procedures, staffing, food quality and quantity control, space and maintenance, safety, sanitation, merchandising and career options will be covered. (*Not available for credit to students who have taken 229-550.*) **FW**

245-600 Integrated Management Systems—Hospitality 2 Credits

Exploration, comparison and synthesis of practices, concepts and theories in hospitality management systems. **P:** 245-205. **FWS**

245-614 Catering 3 Credits

Theory and application of operational and managerial principles for on- or off-premise catering for special events. (*Not available for credit to students who have taken 229-514.*)

P: 229-124, 229-260 or consent of instructor, junior standing or higher. **FW**

245-625 Hospitality Industry Law and Liability 3 Credits

Laws applicable to ownership and operation of inns, hotels, motels, restaurants and other places of public hospitality. **P:** 160-318. **FW**

**245-626 Hospitality Industry—
Employee and Labor Relations 2 Credits**

Investigation of employee and labor relations in the hospitality industry; history, legality and techniques of dealing with unionization. **FW**

245-640 Sociocultural System of Tourism 3 Credits

Various psychosocial dimensions of tourism: motivation, development, community and conflict as related to consumer-tourists, tourists and residents. **W**

245-644 Resort Planning and Operation 3 Credits

Planning and operation of individual destination resorts. Analysis of resort concept, history, master planning, environmental impact, facility design, maintenance and operational management.

P: 245-340 or consent of instructor. **W**

245-645 Geography of Tourism 3 Credits

Locational analysis of land use and human migration in national and international tourism. **P:** 245-240, 245-340 or consent of instructor. **FW**

245-656 Microwave Oven 2 Credits

Application of microwave heating principles to food preparation and service. **FWS**

245-660 Consumer Credit 1 Credit

Types and sources of credit, determination of credit costs, considerations before using, and regulatory laws. **P:** 245-360 or consent of instructor. **S**

245-663 Consumer Law 1 Credit

Major federal and state consumer protection laws, difficulties in obtaining passage and implementation, and pending federal and state consumer protection legislation. **P:** 245-360 or consent of instructor. **FW**

**245-670 Hospitality—Financial Analysis,
Budget and Forecasting 3 Credits**

Application of accounting and financial analysis techniques to managerial decision-making in hospitality industry.

P: 160-206, 245-370 and 245-371. **FWS**

245-676 Family Finance 2 Credits

Financial decisions and judgments that average individuals and families must make during a lifetime; income and occupation, family expenditures, credit, savings, taxes and estate plans. **P:** 320-201. **FW**

245-678 Financial Planning for Retirement 2 Credits

Financial considerations made in preparing for and during retirement. Emphasis on the values, goals, income, expenditures, credit, savings, investments, taxes and estate plans. **P:** Senior standing. **FWS**

245-681 Special Problems in Habitational Resources 2 Credits

Current problems in habitational resources; seminar topic chosen by instructor, individual or group. **R FWS**

245-681A Special Problems in Habitational Resources 2 Credits

R FWS

245-682 Hospitality and the Handicapped Traveler 1 Credit

Provide increased sensitivity to needs of handicapped traveler; problems and possible solutions for hospitality organizations. **FW**

245-684 Seminar in Property Management 2 Credits

Culminating professional course for the property management minor program. Preparation of a property management plan for a specific property. Discussion of current trends and industry problems.

P: Reserved for final semester for students in Property Management minor. **W**

245-702 Operational Controls in Food Service Management 1 Credit

A management plan designed to incorporate all necessary controls the institution needs to minimize incurred expenses and maximize work performance associated with production. **S**

245-710 Issues in Hospitality and Tourism 2 Credits

Significant topics, trends and issues in hospitality and tourism are investigated, developed and presented. **P:** Admission in Hospitality and Tourism. **F**

245-711 Quantity Food Production 4 Credits

Quantity food production management concepts; menu planning, work production schedules, production analysis, food and labor cost controls, and sales projections, crisis and service management techniques; lab work in quantity food production and service; recipe development and introduction to productivity and work simplification concepts.

P: 229-124 or 229-240 and 229-206 or 229-212 or consent of instructor. **FWS**

245-747 Hospitality and Tourism Research Interpretation 3 Credits

Interpretation of advanced qualitative and quantitative research findings in the hospitality and tourism industries. Includes examination of data collection techniques and current research trends, including segmentation, group differentiation, product positioning and image formation.

P: 421-740 and 354-530. **W**

245-780 Seminar in Hospitality and Tourism 1 Credit

Discussion and interpretation of recent research in hospitality and tourism. Choice of problems based upon the needs and interests of the students.

P: Graduate standing. **FW**

245-789 Thesis in Hospitality and Tourism 1-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, research methodology, conducting of research, interpretation of findings, and preparation of the final draft according to thesis standards. Student may enroll for variable credits in various semesters with a final total of six.

P: 421-740 and approval of major adviser. Total credits must accumulate to six. In-progress grading option appropriate until the six credits are earned. **FWS**

Interdepartmental—Liberal Studies

300-511 Topics in Women's Studies 1-3 Credits

Exploring, from interdisciplinary perspective, new information and ideas in a selected area of significance to women's studies.

P: 300-210 or consent of instructor. R

300-575 The Ascent of Man 2 Credits

Exploring the nature and intellectual, philosophical and technical growth of humankind using "The Ascent of Man" TV series as basis for thought and discussion. P: Junior standing or consent of instructor. W

Anthropology

303-610 The Anthropological Study of Family Systems 3 Credits

Anthropological, cross-cultural view of family systems, with attention to their organization, functions, dynamics and articulation with other institutions.

P: 303-220 or consent of instructor. W

303-660 Anthropology of Human Relations 2 Credits

Human relations, viewed intraculturally and cross-culturally, explored through family culture and its networks with the greater society, world view systems, and communication patterns. Applications to specific Wisconsin cultures. W

Art and Design

304-500 Drawing II 1-3 Credits

Continuation of 304-100; exploitation of media for creative and expressive ends. Initial enrollment must be for three credits. P: 304-100. R FW

304-501 Life Drawing I 3 Credits

Drawing the human figure in action or at rest; problems in figure composition.

P: 304-100 and 304-500. FW

304-502 Life Drawing II 1-3 Credits

Advanced problems in figure composition and graphic interpretation of the figure. Initial enrollment must be for three credits. P: 304-501. R FW

304-503 Design 3 Credits

Application of basic design principles using various media for development of visual sensitivity to three-dimensional form. P: 304-101. FW

304-509 Painting I 3 Credits

Introduction to character and use of various painting media; work from still life and life with reference to problems of two-dimensional color composition.

P: 304-500. FWS

304-510 Painting II 1-3 Credits

Advanced work in oil painting; exploitation of medium for creative and expressive ends. Initial enrollment must be for three credits. P: 304-509. R FWS

304-511 Sculpture I 3 Credits

Introduction to sculptural concepts. P: 304-500 or equivalent. FW

304-512 Sculpture II 1-3 Credits

Advanced problems in sculpture; exploitation of media for creative and expressive ends. Initial enrollment must be for three credits. P: 304-511. R FW

304-513 Ceramics I 3 Credits

Basic design and techniques of ceramic production for artist/potter; forming, firing and surface treatment. FWS

304-514 Ceramics II 1-3 Credits

Use of clay, glazes and kiln for design and production of high-fired ceramics. Initial enrollment must be for three credits. P: 304-513. R FWS

304-515 Art Metal I 3 Credits

Design and construction of jewelry and objects in precious and non-precious materials with relationship to human interaction. P: 304-101 or equivalent. FWS

304-516 Art Metal II 1-3 Credits

Advanced problems in design and construction of jewelry, hollow forms and objects in precious and non-precious materials. Initial enrollment must be for three credits. P: 304-515. R FWS

304-517 Printmaking I 3 Credits

Introduction to the concepts and techniques of printmaking.

P: 304-100 and 304-101. FWS

304-518 Printmaking II 1-3 Credits

Advanced work in the processes of relief, silk-screen, etching or lithographic printmaking. Initial enrollment must be for three credits.

P: 304-500 and 304-517. R WS

304-520 Clay and Glaze Laboratory 1 Credit

Procedures and processes in testing of clays; formulation of clay bodies and development of clay slips and ceramic glazes for artist/potter.

P: 304-513 or 304-514 or consent of instructor.

304-522 Modern Art 3 Credits

The main currents and developments in art from Monet and Cezanne to 1950. F

304-523 Survey of Art—Ancient Through Medieval 3 Credits

The painting, sculpture, architecture and minor arts in the ancient western world.

304-524 Survey of Art—Renaissance Through 20th Century 3 Credits

Sculpture, painting, architecture and minor arts of western world from 14th century to present.

304-525 Egyptian and Mesopotamian Art 3 Credits

The evolution of the arts of ancient Egypt and the Near East.

304-526 Greek and Roman Art 3 Credits

The arts of ancient Greece and Rome.

304-527 Medieval Art 3 Credits

The arts of Europe and Byzantium from late Roman Empire to the end of the Middle Ages.

304-528 Italian Renaissance Art 3 Credits

Architecture, sculpture and painting of the Italian Renaissance from 14th to 17th century.

304-530 Northern Baroque Art 3 Credits

Architecture, painting, sculpture and other art forms of 17th century Northern Europe.

304-531 Southern Baroque Art 3 Credits

Development of art in Southern Europe from Italian Renaissance to 18th century.

304-532 Economics of House Furnishing 3 Credits

Study of consumer house furnishing problems based on utilitarian, economic, aesthetic and social values of household commodities. Quantity and quality budgets at different price levels. Visits to house furnishing markets. **F**

304-533 Period Furnishings 3 Credits

A survey of furniture and furnishings in the western world. **F**

304-545 Senior Seminar 1 Credit

Professional practice including portfolio and senior exhibition; current ideas and career opportunities within the art profession.

P: Senior standing in art program. **S**

304-556 Advanced Art Workshop 1-3 Credits

Selected art concepts, processes and media will vary to serve special student populations. For students familiar with workshop approach or advanced in art program. Credit determined by individual contract.

P: Consent of instructor. **R**

304-602 American Art 3 Credits

Development of visual arts in the United States from Colonial period to 1950.

304-603 19th Century Art in Europe 3 Credits

History of European art from about 1800 to 1900.

304-604 Art Since 1950 3 Credits

Developments in painting and sculpture in Europe and America since 1950.

304-606 Oriental Art 3 Credits

Art from prehistoric times to 19th century in China, Japan and their spheres of influence.

304-607 Aesthetics 3 Credits

Examination of the philosophers of contending theories in art. **P:** 304-522. **FW**

Biology**308-506 Food Microbiology 3 Credits**

Methods of food preservation, their effectiveness and related food spoilage by microorganisms. Quality control techniques used to determine presence of specific groups of economically important microorganisms. **P:** 308-306. **FW**

308-650 Neuroanatomy 2 Credits

Cross and functional anatomy of the human nervous system with emphasis on the brain and autonomic division. **F**

308-651 Psychobiology 2 Credits

Biological basis of human and animal behavior: evolution of physiological and behavioral adaptations of organisms to their environment. **W**

308-720 Toxicology and Radiation Biology 3 Credits

Symptoms and physiological consequences of exposure to toxic chemicals and radiation. **F**

Chemistry**311-501 Physical Chemistry Lecture 3 Credits**

Fundamental physical chemistry; behavior of gases, liquid state, properties of solutions, principles of thermodynamics, thermochemistry. Taken concurrently with 311-503. Recommended: 311-531.

P: 311-115 or 311-125 or 311-135 and 355-156. **FW**

311-503 Physical Chemistry Laboratory 1 Credit

Lab course to be taken concurrently with 311-501. experimental techniques and apparatus; treatment of experimental data. Recommended: 311-531.

P: 311-115 or 311-125 or 311-135 and 355-156. **\$**

311-511 Biochemistry 4 Credits

Fundamental chemistry and metabolism of carbohydrates, lipids and proteins; second- and third-order structure of proteins; chemistry of nucleic acids; nature and dynamics of enzymes and enzyme action; biological oxidations; lab work in metabolism, chromatography, enzyme action, qualitative and quantitative analytical procedures. **P:** 308-132 and 311-201. **\$ FW**

311-515 Food Chemistry 3 Credits

Organic biochemistry of foods: enzymatic and non-enzymatic changes associated with food preparation and storage (*Maillard-Browning reaction*), denaturation of protein, changes in color, odor, texture and nutritive value. Techniques for isolation and identification of biochemical constituents of foods.

P: 311-115 or 311-125 or 311-135, 311-201 and 311-203. **\$ W**

311-531 Quantitative Analysis 3 Credits

Introduction to the principles of quantitative chemical analysis and training in precision laboratory techniques. **P:** 311-115 or 311-125 or 311-135. **\$ F**

311-535 Instrumental Methods of Analysis 3 Credits

Application of instrumental methods to chemical analysis: electrochemical, spectrophotometric, chromatographic, and thermal analysis. techniques for methods development, sample preparation, optimization of operating conditions, and data analysis needed to obtain accurate, reproducible results by means of instrumentation. **P:** 311-115 or 311-125 or 311-135. **\$ W**

311-541 Chemistry of Materials 4 Credits

Relationship of the chemistry and microstructure of structural materials (*metals, polymers and ceramics*) to their properties; degradation of those materials, corrosion of metals, polymers and ceramics. **P:** 311-115 or 311-125 or 311-135. **\$ FW**

311-553 Environmental Chemistry 3 Credits

Principles and origins of chemical reactions that lead to ecological imbalance; systems that have contributed to large-scale environmental pollution or are of current importance; chemical technology needed to correct imbalance.

P: 311-115 or 311-125 or 311-135. **\$ FW**

311-612 Advanced Biochemistry 3 Credits

Molecular biology of humans and other organisms; biosynthesis and catabolism, emphasizing enzyme action; chemistry of specific tissues and fluids.

P: 311-201, 311-203 and 311-511. FW

Industrial Hygiene**312-542 Industrial Hygiene 3 Credits**

Principles and techniques for recognizing, evaluating and controlling existing or potential occupational health hazards that affect employee safety and health. P: 311-115 or consent of instructor. \$

312-652 Hazardous Waste Management 3 Credits

Management of hazardous wastes; compliance with governmental regulations in recognition, storage, shipping and reporting of hazardous wastes.

P: 311-115. \$ FWS

312-710 Industrial Hygiene Instrumentation 2 Credits

Workplace environment analysis by direct reading and integrated sampling techniques. P: 312-542 or consent of instructor. \$ FWS

312-762 Industrial Hygiene Ventilation and Noise Control 3 Credits

Evaluation and testing of contaminant control ventilation systems for removal of toxic gases, vapors, and particulates from work environments. Evaluation of noise exposures and application of noise control methods to reduce worker exposures. P: 312-542 and 182-552 or consent of instructor. \$ W

Economics**320-510 Women and Work 3 Credits**

Issues pertaining to changes in women's roles in the paid labor force, including past and present participation, the female-male earnings gap, public policy, and employer response. FW

320-680 International Trade 3 Credits

Theory and practice of capital movements; foreign exchange rates and controls; balance of payments; tariffs. FW

English and Journalism**326-500 Literature for the Reading Child and Adolescent 3 Credits**

Critical survey of literature for children (*age 8 to beginning to read adult literature*); adolescent literature and media presentations of literature.

P: 326-102 or 326-112. W

326-502 Topics in Literature 1 Credit

Intensive analysis of selected authors and literary works with emphasis on discourse analysis in group and workshop settings.

P: 326-102 or 326-112. R FWS

326-515 Technical Writing 3 Credits

On-the-job writing for business and industry; reports, letters and other documents. P: 326-102 or 326-112 and junior standing. FWS

326-518 Mass Communication in American Society 3 Credits

History, social implications and future of mass media of communications.

P: 326-102 or 326-112. F

326-535 Writing Technical Manuals 3 Credits

Production of a technical manual—planning procedure, collecting information, analyzing audience, writing and field testing.

P: 326-101, 326-102, 326-515 or consent of instructor. FWS

326-537 Technical Writing Practicum 1-3 Credits

Plan, write and produce a technical document for a client. Principles of document design, clear writing for a specific audience, methods of determining client needs, and methods of producing the final document.

P: 326-515 or equivalent and consent of instructor. R FWS

326-546 Research Reporting 3 Credits

Effective organization and presentation of individual research.

P: 326-102, 326-112. F

326-601 Juvenile Fiction Seminar 1-3 Credits

Children's literature, emphasizing the picture book. Methods of selecting and reading picture books of all types with critical examination. Literary, historical and social implications of picture books.

P: 326-300 or 326-500, senior standing or consent of instructor.

Applied Mathematics**354-530 Statistical Methods 3 Credits**

Histograms, mean and standard deviation, combinatorics, probability; binomial, hypergeometric, normal, chi-square, T and F distributions and their uses; statistical inference; contingency tables, linear models, analysis of variance with appropriate applications.

P: 355-120 or equivalent, and three years of high school math. FWS

354-531 Design of Experiments I 2 Credits

Linear and curvilinear regression, single-factor designs, confidence ellipsoids for means, blocking, Latin and other squares, factorial designs.

P: 354-332 or consent of instructor. F

354-532 Design of Experiments II 2 Credits

Fixed-effect, random-effect and mixed models; nested and nested-factorial designs, split-plot designs, confounding in blocks, analysis of covariance, response surfaces, sequential analysis. P: 354-531. W

354-545 Image Processing 3 Credits

Theory and applications of digital image processing. Mathematical foundations and algorithms for enhancement, restoration, compression, segmentation and reconstruction from projections.

P: 355-255, 355-275, 354-341, 354-332 or consent of instructor. W

354-546 Simulation Modeling and Analysis 3 Credits

Simulation as a problem-solving technique; models, analysis and languages for simulation; data collection; random variate generation; verification and validation; output analysis; optimization of systems.

P: 354-341 and 354-332. FW

354-590 Topics 1-3 Credits

Topics of current importance in applications of mathematics to problems in business, industry, government or society. May be repeated for additional credit with consent of program director. R S

354-590A Topics 1-3 Credits

Topics of current importance in applications of mathematics to problems in business, industry, government or society. May be repeated for additional credit with consent of program director. **R S**

354-741 Computer Programming Techniques 2 Credits

Introduction to computer systems and their utilization. Emphasis on translating language with application to individual research projects, statistical or developmental. (Not available to students who have completed 354-141.)

P: Graduate standing. **FWS**

Physics**372-527 Solid State Physics 3 Credits**

Crystalline structure, lattice vibration and energy states, Brillouin zones, electrons in metals, semi-conductors, and dielectric and magnetic properties of solids. **P:** 372-282 or 372-242 and 355-157 or 355-154. **W**

372-529 Atomic and Nuclear Physics 3 Credits

Elements of atomic and nuclear physics. **P:** 372-223 and 355-153. **F**

372-531 Statics 3 Credits

Essential elements of statics: simple force system, theory and application of non-concurrent forces, couples, friction, non-coplanar forces, trusses and other structures. **P:** 354-141, 355-153 and 372-221. **F**

372-533 Dynamics 3 Credits

Essential elements of dynamics: rectilinear, angular and harmonic motions; forces producing motion, work, energy, acceleration, impulse and momentum.

P: 372-531. **W**

372-535 Optics 3 Credits

Optics with emphasis on the wave nature of light: interference diffraction, polarization and coherence; their applications in holography.

P: 372-223, one year of calculus. **W**

Political Science**375-510 Public Policy Analysis 3 Credits**

Analysis of origins of public policy and policy-making process. Specific case studies of public policy. **P:** 375-210 or consent of instructor. **W**

375-550 Politics and Technology 3 Credits

Contemporary and future technological innovations; relationship between political institutions and promotion, regulation and impact of industry and technology in the United States and other selected countries.

P: Junior standing or senior standing. **F**

Sociology**387-515 Criminology 3 Credits**

Sociological analysis of structure and function of criminal law, variables of criminal behavior and operation of criminal justice system. **P:** 387-110. **W**

387-525 Sociology of Leisure 3 Credits

Institutional approach to effects of leisure on social structure; values reflected in leisure; problems with increase in leisure resources. **P:** 387-110. **W**

387-530 Sociology of the Community 3 Credits

Community structure, chiefly in the United States; variability and current trends, research techniques, community development. **P:** 387-110. **FW**

387-540 Sociology of Work 3 Credits

Human behavior in various types of employment and occupations; trends in U.S. occupational structure. **P:** 387-110. **FW**

387-550 Sociology of Technology 3 Credits

Relationships between technology and social structure with emphasis on future projections. **P:** 387-110. **FWS**

387-560 Sociology of Juvenile Delinquency 3 Credits

Definitions of and trends in deviant behavior among youth; research findings; efforts in prevention, control and treatment. **P:** 387-110. **FW**

387-710 Sociological Foundations for Guidance 3 Credits

A sociological perspective will be briefly introduced (or reintroduced), applied to an examination of certain problems of modern society relevant to the practice of the guidance counselor, and finally, directed to an analysis of the social role of the guidance counselor. **S**

Speech**391-508 Speech Skills for Business and Industry 2 Credits**

Technical speaking; projects in application of speech skills and activities in business and industry. **P:** 391-100 and junior standing. **FWS**

391-514 Interviewing 1 Credit

Principles and techniques for interviewee in employment interviews.

P: 391-100. **FW**

391-554 Television Programming and Performance 3 Credits

Planning, writing and performing instructional, public service, special feature or dramatic television programs. **P:** 391-100 and junior standing or consent of instructor. **FW**

Counseling**413-501 Introduction to Guidance 2 Credits**

Policies and practices of organized guidance programs in educational settings; historical, philosophical and cultural bases for guidance services; guidance techniques for teachers; cooperative efforts of teachers, parents and counselors.

FWS

413-571 The Psychology of Marriage and the Family 2 Credits

A study of the interpersonal relations involved in dating, mating and family collaboration with growing awareness of patterns for self-integration. **FW**

413-600 Workshop: Counseling/Psychological Services 1-3 Credits

Current specialized topics studied through experiential activities.

P: Consent of instructor. **R FS**

413-600A Workshop: Counseling/Psychological Services 1-3 Credits

Current specialized topics studied through experiential activities. Continuation of course 413-600. **R FS**

413-600B Workshop: Counseling/Psychological Services 1-3 Credits

Current specialized topics studied through experiential activities. Continuation of course 413-600. **R FS**

413-629 Guidance in the Elementary School 2 Credits

Nature and conditions of guidance in elementary schools; curricular and non-curricular guidance techniques, referrals, parent counseling; guidance principles and practices applied to elementary school child. **WS**

413-647 Behavior Problems of Children 2 Credits

Psychological, social and environmental factors contributing to developing child's behavior; cause and treatment of behavioral disorders in children 3 through 12; methods of observing, diagnosing, documenting and interpreting; underlying behavioral dynamics of problem children.

P: Consent of instructor. **WS**

413-666 Alcoholism and Family Systems Intervention 2 Credits

The role of alcoholism in the family and how to intervene therapeutically. **WS**

413-675 Counseling Theory 2 Credits

Theoretical approaches to counseling; psychoanalytic adaptations, behaviorism, trait-factor, client-centered and others; nature of man, underlying personality theory, goals of counseling, role of counselor and illustrative practical applications in each approach; develop beginning personal theory of counseling.

P: 413-501. **FWS**

413-694 Counseling Older Persons 2-3 Credits

Training service providers in counseling skills and gerontology through discussion, observation and supervised counseling experiences. **W**

413-700 Seminar in Counseling and Psychological Services 1-3 Credits

Special topics on current developments in the field. Each seminar is devoted to a specific development to be indicated with a subtitle and description.

P: Consent of instructor. **R S**

413-700A Seminar in Counseling and Psychological Services 1-3 Credits

Special topics on current developments in the field. Each seminar is devoted to a specific development to be indicated with a subtitle and description.

P: Consent of instructor. **R S**

413-705 Play Therapy 2 Credits

A survey and study of play therapeutic techniques. Observation and supervised experiences. **P:** 479-730, 479-760. **FWS**

413-715 Orientation to Mental Health Counseling 1 Credit

Orientation to Wisconsin mental health system, Chapter 51.42, and to the role and function of mental health counselors. Counseling services for mentally ill, alcohol and drug abusers, and developmentally disabled will be discussed. **F**

413-718 Shame, Addiction and Substance Abuse 3 Credits

Exploration of the central role of shame in the process of addiction. Relationship between physiological and psychological affects of substances and the "shame based" person on addictions. Implications for treatment.

P: 459-520 or consent of instructor. **F**

413-721 Alcohol and Drug Abuse Treatment Programs 3 Credits

Psychological factors in alcohol and drug abuse. Treatment programs and approaches used by alcohol and drug abuse counselors.

P: 140-574 or concurrent registration or consent of instructor. **W**

413-723 Psychopathology: Assessment and Treatment Planning 3 Credits

Training in the use of the current edition of the diagnostic and statistical manual (DSM) for assessment of mental disorders; use of behavioral and psychometric assessment procedures; treatment planning.

P: 479-561 or consent of instructor. **WS**

413-725 Counseling with Special Populations 3 Credits

Overview of specialized counseling needs in special populations such as ethnic minorities, women and men in transition, chronically ill, job displaced, and strategies for counseling these populations. **F**

413-731 Problems in Counseling and Psychological Services 2 Credits

Plan B investigations are the primary purpose of this course. Students who are ready to write their Plan B paper should register for this course and then confer with the major adviser to select a staff member who will serve as an investigation adviser. Meetings with the adviser are by arrangement only.

P: Consent of instructor or 12 hours of graduate credit in an appropriate program sequence, including 421-740. **FWS**

413-733 Career Development Process and Issues 2 Credits

Career development concepts, theories and related social issues that affect people's career choices. **FS**

413-733A Career Information Laboratory 1 Credit

Laboratory experience with print and non-print occupational, educational and personal information; assessment instruments; and instrument and program evaluation techniques. **P:** 413-733 or concurrent registration. **FS**

413-744 Psychometric Aids to Marriage and Family Therapy 2 Credits

Instruction and practice in the administration and interpretation of tests appropriate for this area. Practice in treatment application of test results.

P: 489-753. **F**

413-749 Guidance and Counseling—Cooperative Education Internship 1-2 Credits

Work and study in an approved position to gain counseling and supervision experience in designated human services. Generally entails recurring supervised work periods, each one building and expanding on the previous one.

P: Completion of the masters degree with the counseling concentration. **\$ R**

413-752 Group Dynamics 2 Credits

A study of group approaches for providing guidance services to pupils. Designed to help counselors and teacher-counselors understand how groups may be used as a setting for guidance and counseling.

P: 413-501, 413-675. **FWS**

413-760 Theories and Techniques of Behavior Modification 2 Credits

Theoretical and empirical bases for utilizing behavior modification procedures in schools, clinics and other institutions. Emphasizes role of behavioral consultant. P: 479-530 or 479-730 or equivalent. **W**

413-763 Marriage and Family Therapy Prepracticum Seminar 1 Credit

An introduction to the clinical practice of marital and family therapy in a state certified outpatient mental health, alcohol and other drug abuse clinic. Preparation for delivery of clinical services to couples and families and clinic management. P: Admission to Marriage and Family Therapy program.

413-765 Organization and Administration of Guidance 3 Credits

Organizational and administrative techniques for providing effective school guidance services in kindergarten to post-secondary programs.

P: 413-675. **WS**

413-768 Mediation in Custody Conflict Resolution 2 Credits

Philosophy, goals and procedures of family mediation as a conflict resolution procedure. **FWS**

413-770 Thesis 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six. P: 421-740, approval of major adviser. **R FWS**

413-775 Alcohol and Drug Abuse Counseling Practicum I 8 Credits

Counseling under supervision in an alcohol and drug abuse treatment facility. Laboratory instruction on various aspects of alcohol and drug abuse treatment approaches. P: 413-788, 413-721 and admission to Alcohol and Drug Abuse Counseling concentration. **F**

413-776 Alcohol and Drug Abuse Counseling Practicum II 8 Credits

A continuation of Alcohol and Drug Abuse Counseling Practicum I. Students will continue a supervised counseling experience in an appropriate treatment facility and related laboratory instruction. P: 413-775. **W**

413-785 Seminar in Hypnosis 2 Credits

Historical and present trends, myths and misconceptions, experimentation, research and counseling/therapeutic uses and misuses of hypnosis and related techniques. P: Consent of instructor and advanced graduate standing.

413-787 Career Placement Services 1-3 Credits

Development of a community or school-based placement system for schools, post-secondary schools, and/or agencies. May be taken for one to three credits and may be repeated once with consent of instructor, if taken for less than three credits. **WS**

413-788 Counseling Process Laboratory 3 Credits

Basic attending and influencing skills used in the one-to-one and one-to-group situations involving laboratory experiences, such as counseling, feedback, critiquing, modeling, assessing and evaluating. **FWS**

413-789 Cognitive-Behavioral Therapy: Principles and Application 3 Credits

Training in the theory and practice of cognitive-behavioral, and solution-focused treatment models. assessment, intervention, and self-management strategies through this approach will be emphasized. Application of cognitive-behavioral techniques to human problems. P: 413-788. **FW**

413-790 Supervised Counseling Practicum 3-6 Credits

A minimum of 120 hours of closely supervised counseling experience through a series of interviews with selected counselees. P: Consent of instructor. **FW**

413-791 Internship in Guidance and Counseling 8 Credits

The student will devote a minimum of 360 hours, full-time (*each quarter*) in a local school serving as a school counselor. In this experience, they will be supervised by university personnel and work with a fully certified local school counselor. Experiences include all aspects of the guidance function. **R FW**

413-793 Marriage and Family Therapy Practicum 4 Credits

Preparation for professional marriage and family counseling services through seminar discussions, observation and supervised counseling experience.

P: 212-793 or concurrent registration. Personal screening and approval by instructor or admission without deficiency to the proposed program in Marriage and Family Therapy; commitment to the second semester sequel; enrollment in 413-794 and 212-794. **F**

413-794 Marriage and Family Therapy Practicum 4 Credits

Sequel to 413-793. continuing preparation for professional marriage and family counseling services through seminar discussions, observation and supervised counseling. P: 212-793 and 413-793, 212-794, concurrent registration. **W**

413-795 Marriage and Family Therapy Practicum 1-2 Credits

The study and application of family theory in a clinical setting.

P: Acceptance into in Marriage and Family Therapy program or consent of the program director. **S**

413-797 Mental Health Counseling Practicum 6 Credits

Minimum of 300 hours of closely supervised counseling experience in an appropriate mental health setting. Regular seminars and individual supervision sessions required. **FW**

413-800 Field Study 2-6 Credits

Experience in action-type field research in pupil personnel services. The student will identify and research a topic directly related to his career position. Preparation and presentation of a formal report of the study to appropriate personnel. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six. **R FWS**

413-892 Advanced Counseling Practicum 2 Credits

Clinical supervised counseling experiences in a variety of school institutional and agency settings. Designed to assist the student to more adequately understand and apply the dynamics of human behavior in the one-to-one counseling relationship. A minimum of 60 to 90 clock hours of experience is required. **P:** 413-790. **R** FWS

Education**421-502 Global Perspectives for Educators 3 Credits**

Primarily for education students interested in introducing global perspectives into the classroom. The methodology, materials and instructional strategies necessary for effective implementation of global education in schools and individual classrooms will be covered. **FW**

421-507 Applied Human Relations 2 Credits

An experiential course focusing on major themes affecting human relations. **FWS**

421-536 Multiculturalism: Issues and Perspectives 2 Credits

Intensive study of diversity in U.S. schools. Examination of the educational needs of students from various ethnic, cultural, religious, language and social class groups. Discussion of issues related to racism, sexism and oppression. **FWS**

421-574 Clinical Field Experience—Mentoring 1-2 Credits

Supervised one-on-one or small group teaching experience in a school or other educational setting in response to the special needs of high ability students. Emphasis is on critical thinking, problem-solving skills and creative expression. **P:** 431-595 or consent of instructor. **FWS**

421-576 Field Experience—Cross-Cultural Experience 1 Credit

Supervised one-on-one or small group experience in a school or other setting in response to a special academic or social need with representatives of one or more of the following designated ethnic minority groups—African Americans, Asian Americans, Pacific Islander Americans, American Indians and Hispanic Americans, and various socioeconomic groups, specifically the low-income. **P:** 421-536 or consent of instructor. **FWS**

421-580 Reading and Language Arts in Elementary Education 3 Credits

Current philosophies in reading and language arts education, the centrality of language arts to the elementary curriculum and methodologies for the elementary classroom. **FWS**

421-581 Preclinical: Elementary Education Language Arts—Reading 1 Credit

Supervised teaching experience in developing the prospective teacher's ability in elementary education language arts and reading skills. **P:** 421-580 or concurrent registration. **FWS**

421-582 Secondary Reading and Language Development 2 Credits

Effective utilization of reading and language development methodologies in secondary content area classrooms. **P:** 421-303. **FWS**

421-600 Workshop—Special Topics in Education 1-3 Credits

Current specialized topics studied through experimental activities. **P:** Consent of instructor. **R**

421-600A Workshop—Special Topics in Education 1-3 Credits

Current specialized topics studied through experimental activities. **P:** Consent of instructor. **R**

421-600B Workshop—Special Topics in Education 1-3 Credits

Current specialized topics studied through experimental activities. **P:** Consent of instructor. **R**

421-615 Educating At-Risk Students 2 Credits

Characteristics, needs, assessment procedures, alternative curricula and methods, intervention, and management strategies for at-risk students.

421-641 Education Evaluation 2 Credits

Testing, the interpretation of tests by means of simple statistical procedures; methods of evaluating educational programs.

421-683 Seminar in Reading Methods for Secondary Schools 1 Credit

Selection, research and presentation for discussion of topics related to reading in secondary schools. **FWS**

421-690 Learning Style Theory and Application 2 Credits

An introduction to the educational sciences, including cognitive mapping. Emphasis is placed on the practical application of the educational sciences in an educational setting. **P:** Junior standing.

421-700 Philosophy of Modern Education 2 Credits

A comparative study of the main schools of educational philosophy and of their influence in contemporary education, thought, and practice, points of agreement and of conflict.

421-702 Principles of Supervision 2-3 Credits

Basic principles, types, functions, organizations and plans of supervision. Interpretation and application of creative supervision plans; individual and class projects concerned with applied methods of supervision in selected educational areas. **WS**

421-705 Social Thought of American Educators 2 Credits

The school as a social institution within American democracy. Contributions of the past to education and current philosophies. Historical review, evaluation and consideration of the public school as a social institution.

421-712 Analysis of Teaching Behavior 2 Credits

Principles and strategies for analyzing teaching behavior in which strengths, desired improvements and a professional development plan are identified.

421-714 Teaching Strategies 4 Credits

Intensive study and practice in mediating the learning process. Focus on the individual teacher and his active role as an instrument which can bring about predictable changes in student cognitive behavior. Minor consideration given to affective and psychomotor behavior. Lecture, discussion and microteaching. **FWS**

421-720 Instructional Processes 3 Credits

Examine processes utilized in instruction in various content areas. Focuses on methods and techniques for teaching thinking (*reasoning*), problem-solving, decision-making, and valuing skills. Examines social methods of learning with emphasis on cooperative learning.

421-726 Administration 2-3 Credits

Philosophy and principles underlying organization and operation of public education on the local, state and national levels in the United States. Examinations of prevailing practices and current problems of school management.

421-727 Supervision of Student Teachers 2 Credits

Purpose and philosophy of supervision, the role of the cadet center in preparing teachers, relationships and responsibilities of persons involved, orientation, guidance, and evaluation of student teachers. **FWS**

421-729 Introduction to Educational Research 1 Credit

Overview of educational research; identification of research topics and development of a research proposal. **FWS**

421-738 Elementary School Curriculum 2-3 Credits

A study of the social, psychological, cultural, economic, and educational forces operating to bring about changes in the curriculum of the elementary school, K-8. Outstanding state and local curriculum construction programs. Observation and evaluation of the modern elementary school curriculum trends and innovations. Review of curriculum development. **FWS**

421-739 High School Curriculum 2 Credits

A study of the social, psychological, cultural, economic and educational forces operating to bring about changes in the curriculum of the secondary school. Outstanding state and local curriculum construction programs. Observation and evaluation of the modern high school curriculum, trends and innovations. Review of curriculum development. **FWS**

421-740 Research Foundations 4 Credits

This course serves as an introduction to basic concepts and principles in educational research. The course utilizes mastery grading and elements of individualized instruction. The course functions to help prepare the student for graduate research experiences and also to prepare to be an articulate consumer of research upon completion of the course.

P: Graduate standing or consent of instructor. **FWS**

421-742 Program Evaluation 3 Credits

Surveys theory and practice of evaluating the effectiveness of a variety of human-service delivering systems, including education. Develops applied competencies in analyzing values and needs of decision makers and articulation and assessment of program objectives (*both process and product*). Emphasis on building efficient, ongoing evaluation systems.

421-744 Seminars in Education 1-3 Credits

Special topics on current developments in the field. Each seminar devoted to a specific development to be indicated with a subtitle and description. **R FWS**

421-750 Curriculum Theory and Practice 2-3 Credits

A study of curriculum theory and its application. An analysis and development of a rationale, writing educational objectives, identifying a body of knowledge, specifying methodology, and conducting curriculum evaluation. **FWS**

421-765 Problems in Education 2 Credits

Identification, selection and completion of a research problem in education culminating in a Plan B research paper.

P: 421-740, approval of program director. **FWS**

421-770 Thesis 2-6 Credits

Independent research under direction of investigation adviser. Selection of problem, review of literature, planning and conducting research, interpretation of findings and preparation of final paper according to thesis standards. Student may enroll for two, four or six semester hours of credit in various terms for a final total of six. **P:** 421-740, approval of program director. **R FWS**

421-811 Structuring Knowledge 2 Credits

Study of methods for structuring knowledge. Relationships between the structure and its application. Structure of knowledge, discipline and curriculum relationships. **P:** Acceptance in Educational Specialist program.

421-816 Instrumentation for Research 3 Credits

Basic concepts in the areas of validity and reliability will be studied and applied to the design of instruments. Emphasis will be placed on conceptualizing the constructs or characteristics to be measured. Techniques of item writing, item analysis, determining reliability, and scaling will be covered, including such ideas as acquiescent set, item difficulty and discrimination. The student will engage in the study of procedures and techniques for gathering, analyzing and reporting data and findings as applied to their proposed field of study.

421-890 Field Study in Professional Education 2-6 Credits

Supervised study which provides the graduate student with the opportunity to: (1) explore in-depth the body of knowledge associated with a selected problem in professional education, (2) provide an educational experience for implementing this knowledge into a selected institutional setting, and (3) devise methods to determine if the implementation is or will be successful.

P: Approval of the program director. **FWS**

Special Education**431-500 Introduction To Individuals With Cognitive Disabilities 3 Credits**

Introduction to etiology of mental retardation; psychological, educational, social and vocational aspects; adjustment techniques used in working with mentally retarded persons. **F**

431-501 Learning Disabilities 3 Credits

Identification, remediation and evaluation of learning disabled; intervention techniques used with adolescents and adults. **W**

431-516 Psychology of the Exceptional Child 2-3 Credits

History and treatment of exceptional individuals; characteristics and development of children who deviate from the norm: learning disabled, gifted, mentally retarded, socially and emotionally disturbed, abused, speech and language impaired, and those with visual, hearing, orthopedic and chronic health problems. **FW**

**431-518 Introduction To Teaching/Assessment
in Special Education 2 Credits**

Provides one-on-one, supervised experience in teaching youth with exceptional education need (EEN). Provides the initial opportunity for the student to teach a young person with EEN in a supervised setting for 50 hours. **FWS**

**431-522 Curriculum and Instruction:
Functional Living Skills 2 Credits**

Curriculum and instructional techniques for developing basic functional living skills for persons with cognitive disabilities, borderline and severe.

P: 431-518, 431-500 and 431-630 or consent of instructor. **W**

431-523 Curriculum and Instruction: Academic Skills 3 Credits

Curriculum and instructional techniques for developing academic skills for persons with cognitive disabilities (*borderline and severe*).

P: 431-518, 431-630 and 431-500 or consent of instructor. **FWS**

**431-524 Curriculum and Instruction:
Career and Transition Education 3 Credits**

Curriculum and instruction for persons with cognitive disabilities, borderline and severe, in prevocational career, vocational education, and transition stressing interdisciplinary cooperation.

P: 431-518, 431-500 and 431-630 or consent of instructor. **F**

431-526 Practicum in Special Education 2 Credits

Off-campus work and study in educational settings with youth with cognitive disabilities borderline (CDB) and/or cognitive disabilities severe (CDS) for a minimum of 50 hours in a supervised setting, utilizing the teaching techniques and methods previously learned.

P: 431-518 and prerequisite or concurrent enrollment in 431-524. **F**

**431-528 Assessment for
Individual Education/Transition Plans 3 Credits**

Diagnosing behavior and learning problems of students with exceptional education needs. Preparing individual educational and transitional plans based on comprehensive assessments.

P: 459-610, prerequisite or concurrent enrollment. **FWS**

431-595 Introduction to Gifted Education 2 Credits

Characteristics of gifted, creative and talented individuals; identification in educational settings; social, psychological and educational aspects of providing for the gifted throughout school years. **S**

431-597 Field Experience in Gifted Education 2-4 Credits

Off-campus experience in gifted student programming in schools, parent organizations, private organizations, extracurricular organizations, or state and federal agencies. Students may enroll for two or four semester hours of credits for a final total of four. **P:** 431-595. **R**

431-601 Identification of the Gifted 2 Credits

Examines characteristics of, and methods for the identification of, gifted and/or creative students. **P:** 431-595. **FWS**

431-602 Psychosocial Education of The Gifted 2 Credits

Examination of psychosocial characteristics, needs and problems as manifested by high ability students, and consideration of strategies appropriate for enhancing mental health in the gifted and talented in the school setting.

P: 431-595. **FWS**

431-605 Curriculum Development for the Gifted 2 Credits

General principles of curriculum development for the gifted. Procedures and suggestions for developing an original program. Guidelines for meeting the needs of special populations of gifted. Teaching/learning strategies used in gifted education. **P:** 431-595 or consent of instructor. **FWS**

**431-630 Mainstreaming Students
With Exceptional Educational Needs 3 Credits**

Behavior and learning characteristics of persons who are cognitively disabled, learning disabled, socially and emotionally disturbed, hearing and sight impaired, orthopedically and chronically health impaired, speech and language impaired, gifted and talented or who suffer from traumatic brain injury, autism, attention deficit disorder, attention deficit hyperactivity disorder; services mandated by federal and state law, M-team process, and individualized educational plan; transitional services; instruction of the handicapped within regular classes. **FWS**

431-662 Classroom Management Techniques 3 Credits

Techniques for motivating handicapped youth, individual and group discipline, behavior modification, educational organization, evaluation, and communication to enhance learning. **W**

431-725 Programming for Vocational Special Needs 2 Credits

Typical and alternative vocational programming for special needs students. Appropriate management strategies for the various program types. **S**

431-790 Special Education Seminar 1-3 Credits

Special topics designed to upgrade the competencies and knowledge of participants on current developments in the field. Content will change to reflect the state of the art in special education. **R FWS**

Vocational Rehabilitation

459-500 Special Topics in Rehabilitation 1-2 Credits

Special topics not available through regular courses.

P: Consent of instructor. **R FWS**

459-500A Applied Biofeedback in Rehabilitation 1 Credit S

459-500B Juvenile Use/Abuse of Alcohol and Other Drugs 2 Credits S

459-500G Grantsmanship in the Helping Professions 1 Credit S

**459-500M Psychophysiological Approaches to
Chronic Muscle Problems in Athletics 1 Credit**

To enable individuals to develop skills in several psychological and somatic treatments for problems of chronic muscle tension in athletic settings. **FS**

459-500N Community-Based Rehabilitation Services 1 Credit

An examination of national priorities for community-based services designed to enhance competitive employment options for severely disabled persons. **FWS**

459-505 Sign Language I 3 Credits

Basic course in manual communication with persons who are deaf. Intensive practice in expressive and receptive communication. **F**

459-506 Sign Language II 3 Credits

Intermediate course in manual communication with persons who are deaf. American sign language and increasing sign vocabulary and communication speed. **P: 459-505. W**

459-509 Introduction to Biofeedback 3 Credits

Theory and applications of biofeedback in psychology, rehabilitation, medicine and education; in-depth review of the field; appropriate uses of biofeedback as a referral possibility; preparation for supervised clinical biofeedback experience. **P: 479-110. F**

459-520 Rehabilitation and Chemical Dependency 3 Credits

Chemical use and abuse with emphasis on the rehabilitation of persons who are chemically dependent and the historical and sociological implications of drug usage. **F**

459-525 Rehabilitation of Public Offenders 3 Credits

Emphasis on programs designed to rehabilitate persons who are public offenders and sociological issues connected with the judicial system. **W**

459-550 Independent Living 2 Credits

An overview of independent living programs in this country including evolution, goals, methods of service delivery, and management of the independent living program. **W**

459-555 Rehabilitation of the Older Disabled Worker 2 Credits

Develop awareness and understanding of older disabled workers with a focus on implementing rehabilitation planning that enables continued participation in the work force or reinsertion into it following disability. **W**

459-558 Rehabilitation Support System Networking 2 Credits

Services, eligibility and appeals process of agencies and community organizations that create formal support systems for persons with special needs; the role of interagency collaboration, informal networks and coalitions that create advocacy channels. **F**

459-560 Assistive Technology 2 Credits

Provision of technology to enhance the lives of persons with disabilities. Delivery system, legislation and issues related to funding are examined. Specific applications in communication, computers, mobility, and workstations and other technologies are reviewed. **FW**

459-565 Laboratory in Rehabilitation Technology 2 Credits

Experience utilizing technological aids/devices developed for persons with disabilities. Modify/adapt equipment to meet specific functional requirements. Construct switch/ control mechanisms for equipment. Develop prototype solutions to vocational and independent living problems.

P: 459-560 or consent of instructor. FW

459-585 Rehabilitation and Mental Retardation 2 Credits

Background in mental retardation; vocational evaluation, adult education and adjustment techniques used with adults who are mentally retarded. **FW**

459-587 Management of Employees with Disabilities 3 Credits

Orientation to workers with disabilities in business and industry. Focus is upon the elimination of attitudinal and environmental barriers as they pertain to hiring, productivity, and retention of workers with disabilities. Governmental requirements, linkage between business and rehabilitation community resources, and staff development are emphasized.

P: Junior, senior or graduate standing. W

459-598 Field Experience in Rehabilitation 1-2 Credits

Off-campus work and study in an approved position to better understand the challenges and potentials of various rehabilitation type careers. **P: 459-101. R**

459-601 Rehabilitation in the Private Sector 2 Credits

Introduction to the private-for-profit sector of rehabilitation. Orientation to the contractual services offered by practitioners. Industrial in-plant models will be contrasted to other models for providing rehabilitation services to workers with disabilities. **F**

459-602 Rehabilitation Program Operations 3 Credits

Principles and practices in the operation of community rehabilitation programs. Emphasis on knowledge of laws, programs, organizational structures, accreditation standards, consumer services, physical plant management, budgeting practices, and strategies for program evaluations.

459-605 Microcomputer Applications in Rehabilitation 2 Credits

Applications of microcomputer technology and adaptive devices in vocational evaluation, work adjustment, placement and administration. **FW**

459-610 Psychological Testing—**People With Exceptional Need 2-3 Credits**

Use of common psychometric tests with specific emphasis on selection, evaluation, administration, scoring, and interpretation of standardized tests for individuals who are disabled, including those from various ethnic and cultural groups. **P: 459-230. FWS**

459-661 Forensics for the Rehabilitation Professional 2 Credits

Orientation to terminology and practices associated with private sector rehabilitation. Materials specific to working with insurance/litigation cases.

P: 308-132. W

459-670 Work Adjustment Services 2-3 Credits

Principles and procedures of adjustment services. Emphasis on the change and improvement of behavior. Supervised practical experience in interviewing, behavior observation, individual work adjustment planning, lesson plan development and report writing. **P: 459-101 or graduate standing. FWS**

459-675 Cognitive Rehabilitation 3 Credits

Cognitive functioning and rehabilitation concepts applied to the delivery of public and private human services. Covers remediation, placement and evaluation of specific consumer needs related to traumatic brain damage, stroke, and brain deterioration associated with aging. **W**

459-680 Application of Theories in Rehabilitation Counseling 3 Credits

Major theories and techniques used in rehabilitation counseling. Development of skills in the use of basic counseling techniques with individuals who are disabled and including those from various ethnic and cultural groups.

P: Counseling experience, counseling course work, or consent of instructor. FWS

459-682 Sexuality and Disability 2 Credits

Investigate sexuality as an integral part of the disability experience. Explore programs, techniques and personal biases in relation to sexuality of persons with disabilities. F

459-685 Group Processes in Rehabilitation Settings 2 Credits

Theory and application of group processes in rehabilitation settings; direct experience as member and facilitator of a group. P: 459-680. W

459-688 Advanced Job Placement 2 Credits

Job placement methods for persons with disabilities. development of employer account systems and the marketing of job placement services. Use of job readiness scales, development of individualized placement plans, and job seeking skills training programs. Current research in job placement will be assigned and discussed. P: 459-410 or consent of instructor. W

459-698 Field Experience in Rehabilitation 1-2 Credits

Off-campus work and study in an approved position to better understand the challenges and potentials of various rehabilitation type careers.

P: 459-101. R

459-700 Seminar—Vocational Rehabilitation 1-2 Credits

A seminar course devoted to the field of vocational rehabilitation and subject materials pertinent to the field. W

459-701 Foundations of Rehabilitation 3 Credits

Foundations of rehabilitation including its philosophical foundation, historical development, organization; professional roles, responsibilities and practices; and future trends. FS

459-703 Physical Disability and Work 3 Credits

Study of physical disabilities and the effects of disability upon work-related and independent living functions. Identification of services that might optimize an individual's overall functional capacity. F

459-705 Practicum in Rehabilitation Facility Administration 3 Credits

Practical experience in administration within a rehabilitation facility. Examples of experience will include fiscal and personnel management, contract procurement and production management, staff development, contract negotiations.

P: Graduate standing and consent of instructor and completion of 15 required credits in Rehabilitation Facility Administration concentration. WS

459-707 Practicum in Vocational Evaluation 4 Credits

A supervised experience that integrates vocational evaluation course material. The student will plan, conduct and communicate findings of comprehensive vocational evaluations with consumers who are disabled.

P: 459-610, 459-717, 459-723 and 459-724 with grade of B or better in each course. FW

459-708 Practicum in Rehabilitation Counseling 3 Credits

150 hours of supervised clinical experience in a rehabilitation setting. The student will perform entry-level duties of a rehabilitation counselor.

P: 459-680 with a minimum grade of B. W

459-713 Aspects of Disability: Physical Disabilities 3 Credits

Study of major physical disabilities including medical aspects and the psychosocial and vocational implications. Will cover the existence, onset, severity, progression and expected duration of disabilities. F

459-714 Aspects of Disability: Cognitive 3 Credits

Major cognitive and psychiatric disabilities and their medical, psychosocial, and vocational implications. Incidence, onset, severity, progression and expected duration (*mental retardation, learning disability, mental illness, brain injury and disease*). W

459-717 Occupational Analysis and Job Placement 3 Credits

Application of occupational analysis, career information, and placement concepts to the practice of job placement of persons with a disability. Includes job development/search techniques and the nature and critical impacting factors of the placement process. F

459-723 Procedures of Vocational Evaluation 3 Credits

Basic philosophies, practices and processes of vocational evaluation applied to individuals with disabilities. Knowledge of specific assessment tools/instruments and application of clinical skills needed to analyze relevant information for program and career planning, identify significant behaviors, interpret findings to others and communicate assessment result. FS

459-724 Laboratory in Vocational Evaluation 3 Credits

Application of the procedures and utilization of the tools of vocational evaluation including interviews, individual evaluation plans, standardized tests, vocational counseling, work samples, situational assessments, work-related behavioral observations. Interpret and communicate findings in a comprehensive vocational evaluation report. FWS

459-735 Rehabilitation Family Therapy 3 Credits

Family functioning and rehabilitation family therapy concepts applied to the delivery of public and private human services. Covers evaluation and intervention focusing on the family as the consumer of rehabilitation services. F

459-737 Rehabilitation and Psychiatric Disability 2 Credits

Investigate vocational rehabilitation approaches to persons with psychiatric disabilities. Review of personality development and theory. Emphasis on understanding psychiatric disabilities and the process of vocational reorientation.

P: 479-561 or consent of instructor. W

459-749 Rehabilitation Cooperative Education Internship 1-2 Credits

Supervised work experience with an approved rehabilitation agency/facility in an area directly related to the student's major concentration. Selection by application and interview. P: Completion of 30 graduate credits. \$ R

459-755 Problems in Vocational Rehabilitation 2 Credits

Identification, selection and completion of a problem in vocational rehabilitation. The problem project will culminate in a Plan B paper.

P: 421-740. FWS

459-764 Case Coordination 3 Credits

Concepts and philosophy of the case coordination in rehabilitation applied to various employment settings. Integration of consumer case study data, identification of service need, and plan development. **P:** 459-713 and 459-714. **FW**

459-770 Thesis—Vocational Rehabilitation 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six.

P: 421-740 and approval of major adviser. **R**

459-780 Administration in Vocational Rehabilitation 2 Credits

A lecture course covering the administrative aspects and methods involved in establishing and supervising a vocational evaluation unit or a total rehabilitation facility. **P:** Consent of instructor or Vocational Rehabilitation major. **W**

459-783 Internship in Vocational Evaluation 6 Credits

A culminating practical experience of 320 hours in the application of the techniques of vocational evaluation. **P:** 459-707 (*grade B or better*); advanced graduate standing; consent of instructor. **WS**

459-785 Internship—**Rehabilitation Facility Administration 6 Credits**

Practical administrative experience within a rehabilitation facility. Students will have practical experience in five or more of the following administrative areas—fiscal, personnel, production, marketing, contract procurement, developing grants and fund raising.

P: 459-705 and approval of major adviser and with minimum grade of B. **WS**

459-787 Internship in Rehabilitation Counseling 6 Credits

Final clinical experience of 300 hours in rehabilitation counseling. Tasks in professional development, interpretation of professional reports, planning and case management, career/vocational/personal/social counseling, job development/placement, community resource utilization, and recording/reporting for clients with disabilities. Repeatable for six additional credits when seeking certification as a rehabilitation counselor (CRC).

P: 459-708 and 413-788, both with a minimum grade of B, and consent of instructor. **R S**

459-798 Field Experience in Rehabilitation 1-2 Credits

Off-campus work and study in an approved position to better understand the challenges and potentials of various rehabilitation type careers. **P:** 459-101. **R**

Psychology**479-520 Psychology: Its History and Systems 3 Credits**

History of psychology and influence of early competing schools of thought: structuralism, functionalism, behaviorism, Gestalt psychology, and psychodynamic psychology. Evolution to present as a diverse behavioral science with emphasis on neobehaviorism, humanistic psychology, and cognitive psychology. **P:** 479-110. **FW**

479-530 Psychology of Learning 3 Credits

A course designed to acquaint the student with the principles of learning drawn from experimental and theoretical psychology. These principles are demonstrated as they apply to animal and human learning. Modern viewpoints toward theories of learning are emphasized. **F**

479-535 Motivation and Emotion 3 Credits

An experimentally oriented introduction to the fundamental principles of motivation and emotion. **P:** 479-110 and junior standing and nine or more credit hours in psychology, consent of instructor. **W**

479-540 Psychology of Individual and Group Differences 3 Credits

Nature and extent of differences in individuals and groups are studied. Intelligence, achievement, aptitudes, interests, attitudes and general personality are the major differences included. Race, sex, nationality, social class and age in relation to individual differences are studied.

P: 479-110 and one additional psychology course or consent of instructor.

479-551 Children's Social Reasoning 3 Credits

Focused, in-depth study of social reasoning from birth through late childhood. Empathy, friendship, altruism, multicultural perceptions, shyness, assertiveness, aggression, loneliness, morality, values and global responsibility. Heredity/environment-based theories. Assessment tools and prevention and intervention programs. **P:** Recommend at least one: 479-251, 212-124, 212-264 or 479-270.

479-552 Adolescent Psychology 3 Credits

The physical, emotional, social, moral and intellectual development of secondary school youth. **P:** 479-110. **FWS**

479-561 Abnormal Psychology 3 Credits

A study of more serious mental disturbances. Emphasis on the growing importance of mental disorders and on their early detection and referral is studied. **FWS**

479-570 Assertive Training Procedures 2 Credits

Training in interpersonal behavior and communications in which persons learn to defend their legitimate rights without violating the rights of others. **FWS**

479-571 Introduction to Health Psychology 3 Credits

Principles of psychology applied to the promotion of health and wellness; prevention of disease, injury and premature death; psychological treatment of illness; improvement of health care; and formation of health policies.

P: Consent of instructor (*usually requires 10 credits in psychology*). **F**

479-574 Psychology of Women 2 Credits

The myths and stereotypes of early psychoanalytic view of women, critical issues and events of female experience, from prenatal through adulthood; meaning of sexuality, contemporary life styles, and the meaning of aging.

P: 479-110. **FW**

479-577 Consumer Psychology 3 Credits

Psychological principles and theories from the areas of motivation, perception, learning, attitude, information processing, personality, groups, organizational psychology, and environmental psychology are applied to the understanding of consumer behavior, consumer problems, and their solutions. **P:** 479-110. **W**

479-579 Public Relations 2 Credits

Introduction to public relations in industry and education including community relations, employee relations, customer relations, media relations, tools of public relations, two-way communications, and special publics. **FWS**

479-581 Industrial Psychology 2 Credits

A survey of the application of psychological principles of man's vocational pursuit. Emphasis is on individual differences and group behaviors which are involved in personnel selection, human factors engineering, industrial safety, motivation, personnel training, and consumer behavior. Course material is based primarily upon the latest behavioral science research in the field of industrial psychology. **P: 479-110. FW**

479-582 Human Resource Management 3 Credits

Organization and coordination of personnel practices and methods. Consideration given to communication, employment, orientation and training, working conditions, supervision, performance evaluation, collective bargaining, salary administration, health and recreation. **FWS**

479-598 Psychology Field Experience 2 Credits

Off-campus work and study in an approved position to better understand the major concepts of psychology as they are applied to help solve and prevent human relations type problems.

479-601 Workshop—Special Topics in Psychology 1-3 Credits

Current specialized topics studied in a small group setting utilizing experimental activities. **P: Consent of instructor. R**

479-603 Management of Employee Reward Systems 3 Credits

Review of issues in the reward and compensation of employees and of systematic methods for the determination of employee wages, incentives and benefits. Psychological theories of motivation, external equity, job analysis, identifying compensable factors used in job evaluation, comparable worth and performance appraisal, individual salary determination. **P: 479-483 or 479-582. W**

479-632 Perception 3 Credits

This course serves as an introduction to human perception. the content of the course is structured around an information processing model, with the sensory and memory facilities considered as information systems. The student will analyze perceptual research, become familiar with classical and modern psychophysical techniques and conduct experimentation in human information processing. **F**

479-673 Psychology of Stress 2 Credits

Nature of stress and stress-related diseases, stress in daily life, techniques for managing stress, and plans for reducing stress in personal and professional life. **FWS**

479-675 Right Brain 2 Credits

The two hemispheres of the human brain. Exploration and experience in right hemisphere modes of consciousness, through techniques such as meditation, hypnosis, drawing, guided imagery and dreaming. **WS**

479-679 Advanced Public Relations 2 Credits

Practice in planning and directing specific public relations programs, using the case problem approach. **P: 479-579 or consent of instructor. W**

479-685 Recruitment and Selection of Human Resources 3 Credits

In-depth examination of the processes involved in the design and implementation of procedures for selecting employees; the impact these procedures have on the organization; and recruitment, job analysis, testing methods, legal issues, selection strategies, career development. **P: 479-582 or 479-483. W**

479-690 Psychological Measurement 3 Credits

An introduction to the assumptions, models and applications of measurement techniques in behavioral science. Test analysis, item analysis, reliability and validity are extensively covered. The course also introduces the student to prediction and measurement of attitudes and opinions. **W**

479-693 Field Practicum in Public Relations Specialization 1-3 Credits

Opportunity to apply public relations principles in a practical setting. All coursework for the public relations specialization must be completed prior to the practicum that serves as a capstone for the specialization. Both setting and job description must be approved by the faculty supervisor. **R FWS**

479-698 Psychology Field Experience 2 Credits

Off-campus work and study in an approved position to better understand the major concepts of psychology as they are applied to help solve and prevent human relations type problems.

479-730 Advanced Psychology of Learning 2 Credits

The theories and principles of learning are studied with emphasis upon totalistic models of classroom learning. **FWS**

479-760 Personality 2 Credits

The nature of personality and the conditions which make for its wholesome development, its maintenance, and integration is studied. Personality inventories used for self-analysis are also studied. **WS**

479-775 Employee Assistance and Health Promotion Programs 3 Credits

Survey of the basic program components, processes and practitioner competencies for developing, implementing, managing and evaluating effective employee assistance and health promotion programs in business, industry, and other organizational settings. **P: 413-675 and 489-753 and 413-666. WS**

479-777 EAHP: Practitioner Process Skills 3 Credits

An overview of the requisite process skills of the employee assistance and health promotion professional including case management, client assessment, crisis intervention, short-term counseling, community referral networks and consultation. **P: 413-675 and 489-753 and 413-666 and 479-775 and 413-788. WS**

479-798 Psychology Field Experience 2 Credits

Off-campus work and study in an approved position to better understand the major concepts of psychology as they are applied to help solve and prevent human relations type problems.

479-850 Psychology of Development 3 Credits

Investigation of individual man, his natures, and development with primary emphasis on the self and implications for education. Study aimed at analysis, synthesis and evaluation levels through seminar approach.

School Psychology

489-601 Brazelton Neonatal Behavioral Assessment 2 Credits

Philosophy and technique of using the Brazelton Neonatal Behavioral Assessment Scale for evaluating infant personality and development.

P: Consent of instructor.

489-701 Seminar—School Psychological Services 2 Credits

Introduction to the field of school psychology. Roles and functions of the school psychologist are explored as they relate to Wisconsin and the nation; political and legal implication of these roles are identified. S

489-710 Psychoeducational Assessment of Young Children 2 Credits

Assessment of the young child with a suspected disability and his/her family, training in the norm referenced, criterion referenced, and play-based assessment of young children. P: 489-753 and 489-743. F

489-731 Problems in School Psychology 2 Credits

Independent investigation into a carefully delineated area of school psychological services in an attempt to bring evidence to bear on a problem. The use of research techniques is required. Reporting of the study is expected to meet the standards appropriate to scholarly writing by professionals in the field.

P: 421-740. FWS

489-743 Advanced Individual Mental Testing 2 Credits

An experience of supervised practice in the administration, scoring, and interpretation of individual tests of mental ability. Emphasis is directed toward the use of such evaluation of intelligence to case history material, the integration of related psychological findings, the determination of prognosis, and planning for the individual client. W

489-745 Assessment of Personality (Projective Techniques) 2 Credits

History, theory and methodological consideration and studies of projective instruments. Instruction in administration, scoring, and interpretation of some currently used devices leading to a knowledgeable understanding of the instruments. P: 489-743 and 413-748. S

489-749 School Psychology

Cooperative Education/Internship 1-2 Credits

Work and study in an approved position to gain experience as a school psychologist. Generally entails recurring, supervised work periods, each one building and expanding on the previous one.

P: Completion of level 61 licensure requirements as defined by Wisconsin DPI. \$ R

489-753 Psychometric Theory and Application 2 Credits

Introduction to psychoeducational theory and concepts in relation to inter and intraindividual assessment. Covers basic statistics, in regard to test construction, test uses and misuses, test selection, purposes of testing, ethics, basic test interpretation processes, and types of tests and testing programs frequently employed by psychoeducational specialists. FS

489-753A Lab—Guidance and Counseling Services 1 Credit

Introduction to basic psychometric materials and techniques employed by counselors. Included are individual inventories, aptitude and achievement tests, problem surveys and other screening devices. FS

489-753B Lab—School Psychology 1 Credit

Introduction to basic psychometric materials and techniques employed by school psychologists. Emphasis is placed upon individual mental tests and procedures. F

489-766 Educational Applications of Neuropsychology 2 Credits

The application of neuropsychological theory and assessment techniques to the education of children who possess cortical damage or dysfunction.

P: 489-753, 489-753B. S

489-768 Diagnosis and Remediation of Learning Disabilities 2 Credits

Develops expertise in understanding human information processing, the administration and interpretation of sophisticated psychological diagnostic instruments, and the prescription of appropriate and precise remediation. Current research in learning disabilities is examined and evaluated. W

489-768A Learning Disabilities—

Diagnosis and Remediation Lab 1 Credit

Laboratory experience where administrative and scoring skills are developed in reference to instruments and techniques introduced in 489-768.

P: 489-743 and 489-768. W

489-770 Thesis 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six.

P: 421-740 and approval of major adviser. R FWS

489-775 School Consultation 2 Credits

Theory and processes of psychological/educational consultation. Develop specific consultative skills through the use of role play, feedback, and homework assignments to record a trial consultation session.

P: 489-753B and 489-753. W

489-777 Law and Legal Issues:

School Counselors and Psychologists 1 Credit

Federal and state statutes, and case law impact on administrators', teachers', school counselors', and school psychologists' professional practice in educational settings, and state, county and local social service settings. F

489-778 Psychoeducational Disability 3 Credits

Etiology, characteristics, and individual educational program (IEP) development for children with exceptional educational needs (EEN) such as mental retardation, emotional disturbances, behavioral disorders, social/cultural deviation and multihandicapping conditions. F

489-781 Field Practicum in Psychoeducational Services I 3 Credits

Provides the prospective school psychologist with the initial "on site" experience of functioning as a school psychologist. Special educational evaluations, programming and introduction to complex cases and staffings. FW

489-782 Field Practicum in Psychoeducational Services II 3 Credits

Provides continuing "on site" experience of functioning as a school psychologist. Increased applications of expanded assessment skills, more complex diagnostic problems, intervention techniques and leadership roles within the placement setting. **P:** 489-781. **FW**

489-784 Clinical Practicum in Psychoeducational Services I 2 Credits

This practicum course is designed to provide more intensive and extensive clinical experiences. Work with preschool children, post-school young adults, school-age children and their parents. Special assessment and intervention techniques are emphasized. **P:** 489-743 and 413-748. **FWS**

**489-785 Clinical Practicum—
Psychoeducational Services II 2 Credits**

Provides integrative learning experiences into the role and style of function appropriate to the individual and the profession. Long-term therapeutic contacts are required. Experience in one or more areas of specialization is available. **P:** 489-784. **FWS**

489-792 Internship in School Psychology 8 Credits

The student will devote a minimum of 360 clock hours, full time (*one quarter*) in supervised internship experiences. The student will be working with a certified school psychologist in local area schools and/or other approved personnel in other approved situations; e.g., a counseling psychologist in the American Psychological Association-approved university counseling center.

P: Completion of the School Psychologist I curriculum. **R**

Transdisciplinary**500-735 Investigations 2 Credits**

A research experience which culminates in a Plan B paper.

P: 421-740 and admission to degree candidacy. **FWS**

500-770 Thesis 2-6 Credits

Independent research under direction of investigation adviser. Selection of problems, development of outline, review of literature, compilation of bibliography, plan of method of attack, conduct of research, interpretation of findings, and preparation of the final paper according to thesis standards. Student may enroll for two, four, or six semester hours of credit in various terms with a final total of six.

P: 421-740 and approval of graduate program director. **R FWS**

Graduate Faculty



- Donna M. J. Albrecht**, Professor, Ph.D., 1980, University of Minnesota; M.S., 1969 and B.S., 1968, UW-Stout; Home Economics.
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- James Bjornerud**, Professor; Ph.D., 1970, University of Minnesota; M.Ed., 1961, Ohio University; B.S., 1960, Bemidji State Teachers College; Industry and Technology.
- Alan A. Block**, Associate Professor; D.A., 1990, St. John's University; M.A., 1976, Hofstra University; B.A., 1969, Roanoke College; Education and Human Services.
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210 Bowman Hall		School of Education and Human Services	232-2687
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Housing (<i>off-campus</i>)	232-1450	School of Liberal Studies	232-1345
123 Memorial Student Center		106 Harvey Hall	
Housing (<i>on-campus Residence Life Office</i>)	232-1121	Stout University Foundation	232-1151
170 Price Commons		Louis Smith Tainter House	
Information-Service Center	232-1431	Student Employment	232-1363
217 Memorial Student Center		210 Bowman Hall	
Instructional Resources Service (<i>textbooks</i>)	232-2492		
101 Ray Hall		For numbers not listed, call	232-1122

Campus Guide

Academic/Administrative Buildings

- | | |
|-------------------------------------|---|
| 1. Student Health Center | 13. General Services Building |
| 2. Louis Smith Tainter House | 14. Stout Vocational Rehabilitation Institute |
| 3. Administration | 15. Library Learning Center |
| 4. Harvey Hall | 16. Home Economics |
| 5. Bowman Hall | 17. Education and Human Services |
| 6. University Services | 18. Memorial Student Center |
| 7. Communication Center | 19. Jarvis Hall—Technology and Science |
| 8. Ray Hall | 20. Merle M. Price Commons |
| 9. Communication Technologies Bldg. | 21. Applied Arts |
| 10. Fryklund Hall | 22. Johnson Fieldhouse |
| 11. Child and Family Study Center | 23. Health and Physical Education |
| 12. Heating Plant | 24. Burton E. Nelson Field |

Residence Halls

- | | |
|---------------------------------|---|
| A. Wigen Hall | F. Antrim-Froggatt Halls |
| B. Hovlid Hall | G. Curran-Kranzsch-Tustison-Oetting Halls |
| C. Fleming Hall | H. South Hall |
| D. Jeter-Tainter-Callahan Halls | I. Hansen-Keith-Milnes-Chinnock Halls |
| E. North Hall | |

Parking

During hours of enforcement, all non-metered campus parking requires display of a permit. Permits are available from the Parking Office in the University Services Building (6), 817 S. Broadway, Phone: 715/232-1792.

- | | |
|---------------------------------------|---------------------------------|
| Meter Paid Parking | Resident Students, North Campus |
| Reserved, Faculty and Staff | Reserved Resident Students |
| Commuter, Faculty, Staff and Students | Motorcycle Parking |
| Resident Students, South Campus | Reserved Parking |

Parking Enforcement

Permit Lots and Meters

Permit enforced: 7 a.m. – 5 p.m., M–F
Parking prohibited: 2 a.m. – 7 a.m., M–F

Resident Student Lots (Blue and Yellow)

Enforced 24 hrs/day;
5 p.m. Sunday – 5 p.m. Friday

Disabled, No Parking areas, loading, yellow zones:
Enforced 24 hours daily

Free Public Parking:

All campus lots are open to the public during those times when permit and meter enforcement is not in effect, and parking is not prohibited.

Accessibility Symbols

- | | |
|----------------------|---------------------|
| Slope/Ramp | Handicapped Parking |
| Steep Incline | Metered Parking |
| Accessible Entrances | Curbscuts |
| Electric Doors | Walkway |

Getting to UW-Stout

